Graduate School of Public & International Affairs

Major Research Paper

Taking Back Control: Can Brexit Deliver Regulatory Independence?

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Contents:

Abstract:
In this paper, I examine the argument that Brexit can deliver regulatory independence. I focus on the importance of the new non-tariff barriers to trade that UK exporters would face if the UK followed through with its stated intention to leave the EU single market. This focus is in response to the tendency of pro-Brexit bodies such as the European Research Group (ERG) and Economists for Free Trade (EFT) to assume away the non-tariff barriers to trade that would be entailed by the UK's regulatory divergence from the EU. Firstly, I examine the architecture of the EU regulatory state and the literature on the state and non-state determinants of outcomes in international regulatory convergence. Subsequently, I conduct three case studies on some of the UK sectors most exposed to new regulatory barriers to trade – financial services, automotive and agriculture. I argue that there is an inescapable trade-off between regulatory independence and the ongoing viability of these domestic industries. Finally, I examine the critical regulatory issues raised on the island of Ireland by the UK's attempt to leave the EU single market. I argue that this will bind the UK into ongoing regulatory dependence on the EU, as a rule-taker rather than a rule-maker.

Terms and Abbreviations:

- ***3CE*** **-** Third Country Equivalence
- ***CAP*** – Common Agricultural Policy
- ***CEN*** – *Comité Européenne de Normalisation* (European Committee for Standardization)
- ***CENELEC*** **-** *Comité Européenne de Normalisation Electrotechnique* (European Committee for Electrotechnical Standardization)
- ***CETA*** – Comprehensive Economic and Trade Agreement (EU-Canada FTA)
- ***EASA*** – European Aviation Safety Authority
- ***ECJ*** – European Court of Justice
- ***EEA*** – European Economic Area
- ***EFSA*** – European Food Safety Authority
- ***EFT*** – Economists for Free Trade
- ***ERG*** – European Research Group
- ***ESMA*** – European Securities and Markets Authority
- ***EU*** – European Union
- ***EU15*** – The 15 members of the EU prior to the 2004 enlargement
- ***EU27*** – All current members of the EU except the United Kingdom
- ***FTA*** – Free Trade Agreement
- ***GATS*** – General Agreement on Trade in Services
- ***GATT*** – General Agreement on Tariffs and Trade
- ***GFA*** – Good Friday Agreement
- ***GVA*** – Gross Value Added
- ***GVC*** – Global Value Chain
- ***IEC*** – International Electrotechnical Commission
- ***IMF*** – International Monetary Fund
- ***ISO*** – International Organization for Standardization
- ***JIT*** – Just-in-Time
- ***JCPSA*** **-** Japanese Consumer Product Safety Association
- ***MFN*** – Most Favoured Nation
- ***OECD*** – Organization of Economic Co-operation and Development
- ***ROO*** – Rules of Origin
- ***TBT*** – Technical Barriers to Trade
- ***TEU*** – Treaty on the European Union
- ***TFEU*** – Treaty on the Functioning of the European Union
- ***UK*** – United Kingdom
- ***UNECE*** – United Nations Economic Commission for Europe
- ***WTO*** – World Trade Organization

Taking Back Control: Can Brexit Deliver Regulatory Independence?

"We persist in regarding ourselves as a great power, capable of everything and only temporarily handicapped by economic difficulties. We are not a great power and never will be again. We are a great nation, but if we continue to behave like a great power we shall soon cease to be a great nation."
Sir Henry Tizard (1949)

"Si c'est ici le meilleur des mondes possible, que sont donc les autres?"
Voltaire, *Candide, ou l'Optimisme* (1759)

"Everyone has a plan until they get punched in the mouth."
Mike Tyson

1. Introduction:

How close should the UK be to Europe? This is a question that the UK has struggled to resolve since the mid-20th century, as British governments' desire for regional free trade came into conflict with their aversion to supranational control. In his 1999 history of UK-EU relations, Hugo Young pondered the long line of British governments that had been defeated by "the once and future dilemma […]: how to combine influence with exile" (1999: 221). The 2016 referendum vote for the UK to leave the EU ("Brexit") appeared to come down decisively on the side of exile. Yet as post-Brexit politics push the country towards the pursuit of autonomy, legal and economic practicalities continue to push back. How can the UK take back control of economic governance from the regional hegemon without hindering the cross-border movement of goods and services, and without burdening UK businesses with punitive transaction costs?

The UK's degree of regulatory independence will depend on the trading relationship ultimately negotiated with the EU. Three models, known as "WTO Rules", "Canada", and "Norway", will inform this discussion. Should negotiations between the UK and EU break down, the default scenario would be a reversion to trade under World Trade Organization rules. Each WTO member must grant the same "Most Favoured Nation" market access to all other members. The UK and EU would have no preferential relationship, leaving their trade subject to a damaging range of tariffs and regulatory barriers. Members can improve upon this market access

by agreeing free trade agreements that cover substantially all trade between the parties (Dhingra and Sampson, 2017: 4). Canada is independent from the EU and its single market, but enjoys preferential market access and regulatory cooperation secured through the free trade agreement CETA. Finally, the European Economic Area (EEA) is a bloc that is formally outside the EU, but remains functionally within its single market. As an EEA member, Norway benefits from European economic integration while having no political or legislative control over EU decisions. Joining the EEA might respect the letter of the referendum result, but would be a betrayal of its spirit, forsaking exile *and* influence. These models provide inversely related levels of single market access and regulatory independence: EEA membership (full access, no independence), an FTA (partial access, partial independence), and WTO rules (low access, high independence). This dynamic underpins a trade-off that makes regulatory independence incompatible with frictionless trade.

Prime Minister Theresa May's Lancaster House speech of January 2017 confirmed that the UK sought to leave the EU's single market, thereby proposing regulatory divergence ("Hard Brexit") over alignment ("Soft Brexit"). The Prime Minister said: *"Being out of the EU but a member of the single market would mean complying with the EU's rules and regulations […], without having a vote on what those rules and regulations are. It would mean accepting a role for the European Court of Justice that would see it still having direct legal authority in our country. It would to all intents and purposes mean not leaving the EU at all"* (May 2017a).

In March 2017, May's letter invoking Article 50 of the Treaty on the Functioning of the European Union[1] ("TFEU", 2007) went one step beyond in its reference to managing the

[1] Along with the Treaty of the European Union ("TEU", 2007), the TFEU is one of the two primary treaties of the EU, which establish its legal norms and constitutional basis. Article 50 is the treaty provision that allows for the secession of a member state from the EU. It provides for a

"evolution of our regulatory frameworks" (May, 2017b), implying that the UK would chart a differential course. In February 2018, the European Research Group (ERG), an influential pro-Brexit wing of the Conservative Party, responded to political and industrial pushback with a ransom letter to May that offered "suggestions [for] how an internationally-engaged, free-trading, global Britain […] could be achieved" (ERG, 2018). High on this list was the demand for "Full regulatory autonomy […] Your Government must have the ability to change British laws and rules once we leave, rather than being a 'rule taker' without any substantive say in whatever Brussels decides" (*Ibid*). This proposition has received a cold reception from UK businesses that export goods and services to the European market. Business lobbies have clamoured for a reversal of policy to mitigate the risk of economic damage. This would require abandoning the goal of regulatory independence, thereby demoting the UK from rule-maker to rule-taker, in a "perpetual near earth orbit with the EU" (Shipman, 2017: 495).

From the EU's perspective, the UK's attempt to negotiate equivalent economic benefits of EU membership without the inconvenience of regulatory obligations can only be an attempt to undermine its own regulatory autonomy. In the words of Kalypso Nicolaïdis, the UK "continues to yearn for bits of the *menu gourmand* and the *menu touristique*" (2017: 93). From its advantaged position as a member state, the UK secured partial opt-outs from integration. While positioning itself as a third country, the UK simultaneously seeks partial opt-ins that are not on offer. An outcome that sacrifices the aim of autonomy will not be equal to "no change", because rule-taker status entails greater regulatory dependence than before. The UK must now make an invidious choice between economic damage and regulation without representation.

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two-year exit negotiation, meaning the nominal date of Brexit will be 29th March 2019, unless transitional arrangements are agreed.

In this paper, I argue that regulatory autonomy and economic prosperity are incompatible aims for a middle power like the UK. Independence from the single market will alter the viability of the business environment so profoundly that it not a realistic option if the government also values economic stability. While this is a mainstream view of the tradeoffs facing the UK, much of the debate tends to focus on the potential impact of new tariff barriers on trade. While these are undoubtedly important, the corollary issue of non-tariff barriers like regulatory standards suffers from a relative neglect in the arguments of pro-Brexit campaigners. This paper aims to address the constraints they will impose on the UK's trade after Brexit. Brexit will deliver some regulatory independence, such as the opportunity to redesign the system of agricultural subsidy outside the EU's Common Agricultural Policy (CAP). However, this is distinct from regulatory autonomy over trade. This will remain unattainable, as exporters will have to comply with international standards and in many cases will have to deal with more 'red tape' than before.

The rest of this paper consists of seven sections. First, I examine the status quo before Brexit, including the architecture of the EU regulatory state and the division of competences between the supranational and member state levels. Then I examine the literature on the power dynamics of global regulation, including the state and non-state dynamics that determine the setting of standards and regulations. Then I present three case studies detailing the prospects for regulatory independence after Brexit in the UK's financial services, automotive manufacturing, and agriculture sectors. I also analyze a trilemma raised on the island of Ireland by the UK's attempt to diverge from the EU's regulatory orbit. The final section summarizes and concludes.

2. The Pre-Brexit Regulatory Order:

The division of competences in the EU's multilevel legal order is vital to understanding the extent of the UK's pre-Brexit regulatory independence, and the scope for change after secession.

If the referendum result mandated a repatriation of regulatory control, it did so in strikingly absolutist terms: it painted a picture where regulatory responsibility was a unitary competence that, over the decades of EU integration, had been ceded to supranational management. The EU regulatory state is in fact a more disaggregated entity, constituted by the single market's common rulebook, the core principle of mutual recognition, and the supranational network of regulatory agencies. Smits (2014: 346) describes the result as an intermediate balance of powers: "With increasing European integration the creation of rules has to a large extent become a shared competence of both national legislatures and the EU. The national competence to be active in a certain field often overlaps to such an extent with the European competence that only qualifications such as 'fusion' of regulatory levels or 'network governance' still do justice to reality." While this 'supranational scaffolding' partially constrains the domestic autonomy of member states, it still allows for significant domestic freedom and intergovernmental influence over the formulation of new rules and national implementation.

2.1 Why Regulate?

Broadly conceived, regulations are corrective legal instruments, contained within some legal structure that threatens credible penalties in the event of non-compliance. Whyman (2017: 163) notes that their basic design feature is that they are "introduced to solve a problem in the economy, either to curb behaviour or activity which is deemed to have negative consequences upon individuals or society in general, or to resolve an incident of market failure." Regulators target diverse problems, such as collusion, anti-competitive or dangerous business practices, environmental externalities, and financial contagion.

Most regulations inflict a financial burden upon those required to comply. Whyman (2017: 164) supports the Eurosceptic claim that "the majority of the cumulative regulatory

burden imposed upon UK businesses, when measured by value, originates in the EU." This may be uncharitable, given that regulatory costs are easily quantifiable, while intangible benefits are much less so. A basic problem with Whyman's analysis is that even if most of the cumulative regulatory burden on UK businesses originates in the EU, businesses will not be liberated from all regulation simply by leaving the EU. Even an optimistic assessment of the UK's future regulatory independence would concede that Brexit *per se* does not entail a bonfire of regulations, just a downwards transfer of authority. As Springford (2017: 233) notes, UK preferences are, in some sectors, more rigorous the EU's. Moreover, this critique is uneven because it ignores the rationale that increased business costs can provide a social good: "If the end result is that a firm is made to internalise social costs which it had previously managed to externalise, the fact that its costs have risen is no bad thing" (Springford, 2017: 232).

2.2 Regulatory Competence in the European Union:

The TFEU creates a vertical framework of competences that underpins the EU. Article 3 TFEU defines 'exclusive competences' as those residing at the supranational level, applied in common to all member states (e.g. the customs union, competition policy); article 4 TFEU provides for 'shared competences' (e.g the single market, environment and consumer protection); and article 6 TFEU provides for 'supporting competences' (e.g the protection of human health, culture and education) (Smits, 2014: 347). The TFEU originated in the 1957 Treaty of Rome, which established the four freedoms of goods, services, capital and people, and aspired to their institutionalization through the single market, which began to take shape in the 1990s. Beyond the simple notion of a free trade area, the single market integrates participants further into a common legal and regulatory space. The single market is one of three dovetailing components in the EU regulatory state:

1. *The Single Market*
2. *The Principle of Mutual Recognition*
3. *Regulatory Agencies*

2.3 The Single Market:

David Davis, the Eurosceptic Minister for Exiting the European Union, conceded in 2012 that "the EU has enjoyed some successes, namely the single market" (Davis, 2012). This institution's guiding principle is to liberalize intra-EU trade by constraining member states' proclivities for national protection through physical, financial, and technical barriers to trade, thereby creating a level playing field. Underpinning the single market and its four freedoms is the *acquis communautaire*, the accumulated body of European Union legislation from 1958 to the present, which takes precedence over member states' law in the event of a clash. Participants in the single market, including those in the EEA, must accept the *acquis* in its entirety. While Barnard (2017) argues that the indivisibility of the four freedoms is a political and contingent construction rather than a self-evident technical necessity, the EU considers it paramount for reasons of self-preservation: Michel Barnier, the EU's lead Brexit negotiator, restated in October 2017 that "the single market is a set of rules and standards and is a shared jurisdiction. Its integrity is non-negotiable, as is the autonomy of decisions of the 27. Either you're in or you're out" (Boffey, 2017). To the extent that the EU27 maintain their solidarity on indivisibility throughout the negotiations, it is axiomatic that the more access the UK has to the single market, the more obligations it must accept, and the less freedom to diverge it will be afforded.

2.4 Mutual Recognition:

The EU's current regulatory architecture arose from decades of internal contestation over the rights and obligations member states owe each other. While rights are desirable, obligations are onerous, and a framework of reciprocity balances the two. Brexit is an attempted rejection of this framework of regulatory reciprocity. A brief history of regulatory recognition in the EU is instructive for the UK's post-Brexit options. Pelkmans (2016: 1098) frames the establishment of the single market as the result of two converging policy processes: 1) the cross-border intra-EU liberalization of several market types (like goods and services); and 2) 'harmonization', or the progressive approximation of national laws to the same rule. Early treaty commitments aimed to address the fragmenting effects of differing national standards through harmonization of national legal codes alone. However, the politically intrusive nature of harmonization led to an impasse by the mid-1980s (Dinan, 2010: 363). The European Commission's 1986 White Paper[2] attempted to simplify the task of liberalization by developing the supplementary principle of 'mutual recognition' of rules and standards. Where harmonization became impracticable, mutual recognition provided new flexibility by empowering member states to formulate their own rules. Yet this came at a cost. The price of retaining the freedom to set national standards was the obligation to recognize the product standards of all other member states, a cost which was to increase with the accession of new member states.

[2] "*Completing the Internal Market: White Paper From the Commission to the European Council*", Milan, 28-29 June 1985, Published June 1986, CELEX #51985DC0310

The extension of the mutual recognition principle was predicated on the landmark 1979 *Cassis de Dijon* case.[3] In this ruling, the European Court of Justice[4] (ECJ) overruled a German import ban on a French liqueur, which had erected a non-tariff barrier to intra-EU trade based on an arbitrary minimum alcohol standard. Mutual recognition is a principle that liberates a country on condition of external intrusion in that nation's legal order. Nicolaïdis (2007: 685) highlights this paradoxical aspect by calling mutual recognition "a Janus-faced norm […] As a horizontal transfer of sovereignty, it is both about respecting sovereignty and radically reconfiguring it – by delinking the exercise of sovereign power from its territorial anchor through a reciprocal allocation of jurisdictional authority to prescribe and enforce laws." The application of mutual recognition within the single market has been extended in the decades since *Cassis de Dijon.* Owen et al (2017: 7) estimate that today one fifth of all intra-EU trade in goods operates under the principle of mutual recognition. Member states' regulatory independence has been progressively exchanged for a liberalized, business-friendly framework. Importantly, the EU's system of mutual recognition is not absolute, but conditional; the reciprocity is enforced *unless* the member state can convince European courts that a more stringent national standard should be applied for a rationale that supersedes the aim of trade liberalization.

The institution of reciprocity has vital consequences for post-Brexit regulation. In order to avoid a chaotic Brexit with legal and regulatory gaps, the UK has legislated for the wholesale transfer of EU law into the UK's statute books before the day of departure. It is vital to recognise the fact of having compatible rules on exit day is a necessary but insufficient condition for the

[3] European Court of Justice, *Rewe-Zentral AG v Bundesmonopolverwaltung für Branntwein* (*Cassis de Dijon*), Case 120/78, 1979

[4] The European supreme court's official name is the *Court of Justice of the European Union.* However, in the UK it is more commonly known as the European Court of Justice. ECJ will be used henceforth.

continuation of frictionless trade. While the UK will enjoy the benefits of mutual recognition until Brexit takes effect, on the day of departure these benefits will cease to apply despite the rules remaining identical from one day to the next. The additive nature of the *acquis communautaire* will produce greater divergence as time goes on. Following the logic of mutual recognition, the state of having identical rules is not the same as having your rules recognized as such by your trading partners. Mutual recognition is a constraint, and an intrusive one at that; but it is also a participatory privilege. These are two indivisible sides of the single market. Any UK proposals for mutual recognition as a third party to the single market will thus be a request for participation in and exemptions from the framework that full member states could never be granted. The EU's integrity requires that there be no free rides for seceding states.

2.5 Regulatory Agencies:

The 1986 White Paper also formalized a 'new approach' of devolving power on setting common minimum standards from the European Commission. This has resulted in the EU regulatory state moving towards a decentralized agency structure. Over 40 European standard-setting agencies exist today. The EU has established agencies in several waves, in a process of 'agencification', or a progressive tendency to delegate regulatory authority to a quasi-autonomous body. Notable examples of EU agencies include the European Securities and Markets Authority (ESMA), the European Food Safety Authority (EFSA) and the European Aviation Safety Authority (EASA). These agencies are satellite entities, distinct and nominally independent from EU institutions like the Commission, Council and Parliament. They have been established on an *ad hoc* basis without a foundational legal framework to unite them under a single category. Following Chamon's (2010: 283) formulation, they can be loosely characterized as independent permanent bodies with legal personality, some financial and organizational autonomy, and specific sectoral

mandates to develop standards, provide technical advice to EU institutions, and facilitate regulatory dialogue with industrial stakeholders. Agencies tend to have great discretionary power over firms. For instance, the EASA is simultaneously endowed with the two responsibilities: 1) to provide (theoretically non-binding) technical guidelines for new products and services and 2) to approve licenses for those products (Chamon, 2010: 293). This means that many agencies guidelines are non-binding in name only. EU agencies can have *de facto* veto power over firms wishing to operate in the single market.

The future relationship with the EU agencies is of great importance to the UK's prospects of regulatory independence. While there is an obvious concern about the loss of UK representation within these bodies, a greater fear for UK businesses is the prospect of losing the operating licenses acquired while the UK was a member state. The consequences of dropping out of the agencies without a deal could be severe both at the firm level, in terms of raised compliance costs and approval delays for sensitive products, and at the national level where new institutions with unclear mandates would have to be established in short order.

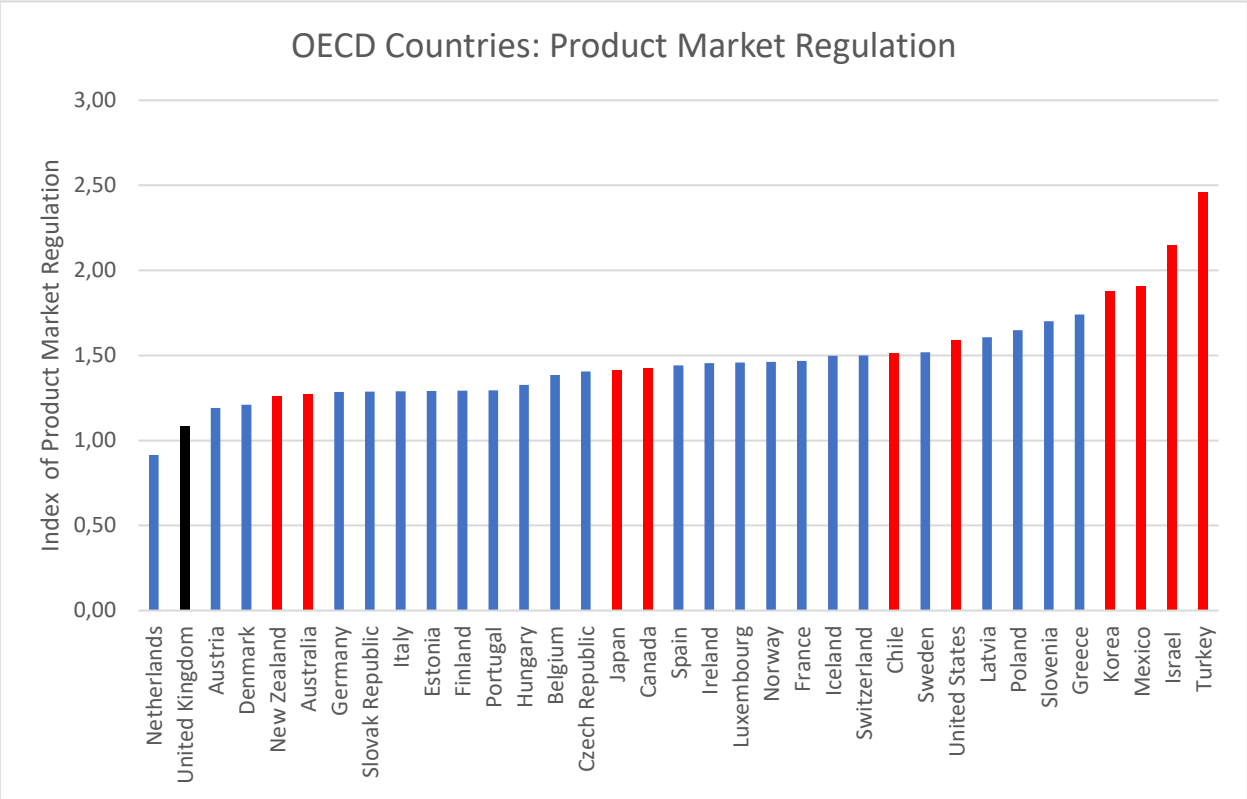
The ECJ is the legal guarantor of the EU agencies, and continuing membership is contingent on the UK accepting its jurisdiction – the oversight of which would directly undermine the stated goal of regulatory independence. Yet some formal recognition by these agencies is essential for UK firms seeking access to consumers in the EU. If the UK government could stomach limited ECJ jurisdiction, and make financial contributions, it could propose opting in to whichever agencies it deemed indispensable as a pragmatic sacrifice of full regulatory autonomy. Yet even a UK concession on these red lines may be objectionable to EU negotiators, for whom the idea of leaving the union and simultaneously opting back into the most convenient parts would encourage other member states to question the value of their own membership.

2.6 Do Member States Have Breathing Space?

It is important not to overstate the rigidity of the EU regulatory state. The EU is in the business of establishing common minimum frameworks in areas of exclusive or shared competence, which still leave leeway for member states and their national regulators to express their preferences. *Contra* Whyman, Springford (2017: 233) emphasizes that member states retain wide-ranging powers to regulate their domestic economies. Furthermore, this often results in standards that go beyond the common minimum threshold imposed by the EU. This is known as 'gold plating'. The practice arises out of the distinction in EU law between 'regulations', typically used for technical specifications, which through EU legal supremacy have direct effect in all member states, and 'directives', which simply oblige the state to arrive at the intended regulatory outcome, with significant autonomy in implementation (Bulmer, 2007: 30).

These arguments suggest two important points about the EU regulatory state. Firstly, the EU is more liberal than is frequently represented. Secondly, its legal framework allows for heterogeneity between member states. These ideas receive empirical support from the OECD's index of product market regulation, which is an internationally comparable set of indicators that measure the degree to which policies promote or prevent competition in areas of product markets where competition is viable.

Fig. 1:

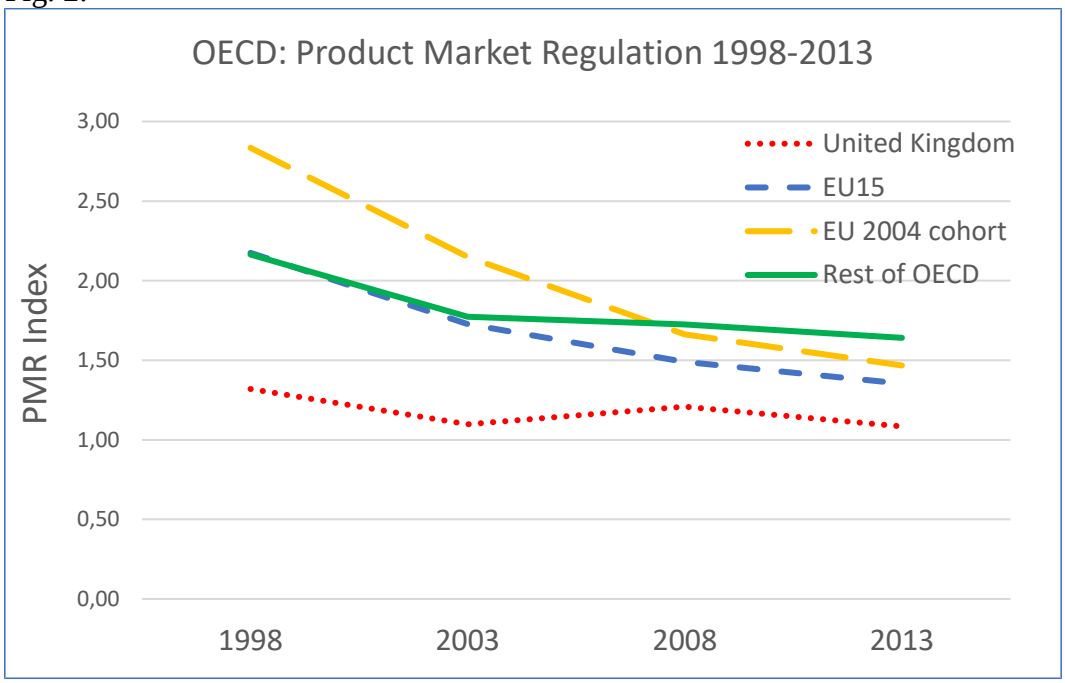


Source: OECD's product market regulation index (2013)

This confirms that for the regulation of product markets at least, there is regulatory latitude within the EU's parameters. Moreover, the UK is less advanced than the Netherlands in its translation of liberal preferences to maximally liberal regulation. If lighter regulation was a motivating aim for voters, then Brexit was the bluntest of available tools.

The same OECD data over a longer time series reveal that the EU15, the 2004 accession cohort, and the UK all experienced an overall decline in the degree of product market regulation (see Figure 2). While the UK begins from a lower level, the proposal that in recent years the EU has presided over a drastic increase its regulatory output appears to be unsupported. The EU is an institution committed to (incremental) liberalization.

Fig. 2:

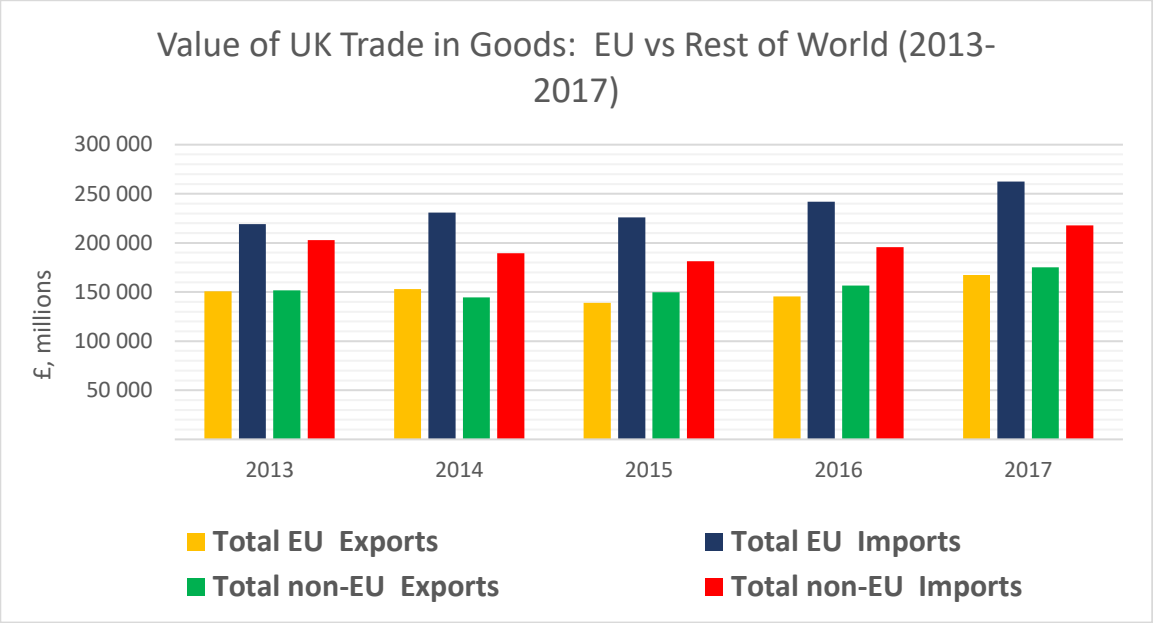


Source: OECD's product market regulation index (2013)

2.7 What could regulatory divergence do to UK trade?

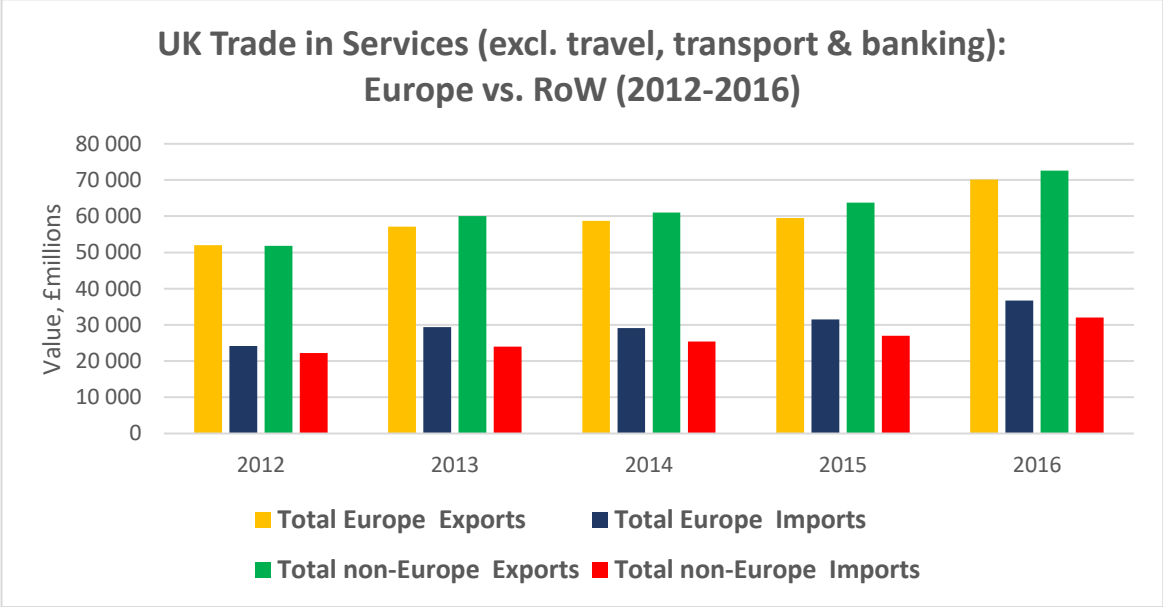
The purpose of harmonization and mutual recognition of regulations is to facilitate international trade. Pro-Brexit campaigners argue that the scope of the UK's current linkage with EU regulation unduly narrows the scope of UK exporters, and consider the process as a chance to realign the UK's trading profile from a more narrowly European one to a more expansive global one. The UK International Trade Minister Liam Fox has argued that this is possible because modern transport and telecommunications technologies mean that traders increasingly operate in a "post-geography trading world" (Fox, 2016). I provide a snapshot of the UK's pre-Brexit trading relationships with the EU and the rest of the world so as to examine the prospects of diverging from the EU's regulatory orbit in favour of more distant non-EU partners.

Fig. 3:



Source: *Office for National Statistics, UK Trade Publication Tables, Feb 2018*

Fig. 4:



Note: Total Europe includes EEA countries and Switzerland

Source: Office of National Statistics, *Total International Trade in Services (excluding travel, transport and banking), analysed by continents and countries, 2012-2016*

The data in Figure 3 show that in 2017 the world's non-EU countries accounted for just 48% of the UK's trade in goods. The fact that a nearby bloc of 27 relatively affluent countries account for 52% of the UK's goods trade is entirely in line with the predictions of the gravity model of trade: bilateral trade tends to be proportional to the size of two partners' economies, and inversely proportional to the distance between them (Springford & Lowe, 2018: 1). Figure 4 represents trade in services, where the UK's comparative advantage lies.[5] It shows a similar picture of deep economic integration with the partners that are closest. Under this measurement, in 2016 50.5% of the UK's services trade was with Europe, compared to 49.5% with the rest of the world. Springford and Lowe (2018: 3) dispute the (intuitively appealing) idea that modern communication technologies make distance an irrelevant factor for trade in services. Their gravity model finds that on average, each 10% increase in distance reduces trade in services by 7%, such that Italy buys the same amount of UK services as Japan does, despite Japan's economy being 2.5 times larger than Italy's.

In sum, the economic integration between the UK and the rest of the EU is predicated on an extensive legal and institutional framework designed to facilitate cross-border trade, and pre-existing trading patterns that display a reliable skew towards proximate partners. For the UK to seek regulatory divergence from the EU would imply new non-tariff barriers between the two. The relative dependence of UK trade on its closest and richest neighbours for trade in goods and services indicate that the potential costs of this would be severe.

[5] This measurement understates UK services trade by excluding key sectors (travel, transport and banking), for which the Office for National Statistics does not provide data.

3. Great Powers, Middle Powers, and Non-State Regulation:

Pro-Brexit politicians articulate a vision in which a middle power in a globalized economy asserts its ability to regulate economic activity independently. Given the radical nature of this vision, it is fitting to ask if this premise for Brexit has theoretical support. The academic literature is highly one-sided in its opposition to the viability of middle-power regulatory independence. While there is consensus that middle powers do not determine regulatory outcomes in the international system, there is debate over what constitutes a great power in this context; which entities have most influence over regulatory outcomes; and to what extent non-state actors have authority over states in standard setting. All of these questions are consequential for Brexit, which is still construed by many in terms of a regulatory independence that may not be achievable even in principle.

There is near unanimity among economists that Brexit will have adverse effects on UK trade, investment and welfare. The Institute for Fiscal Studies conducted a meta-analysis of studies modelling the impacts of the EEA, FTA and WTO scenarios mentioned in the introduction (Institute for Fiscal Studies, 2016: 17-18). The range of negative predictions for UK GDP in 2030 spanning decreases of 2% to 8% as a result of Brexit. There is a lone dissenting organization in the debate over the economics of Brexit. Economists for Free Trade (EFT) have predicted Brexit-induced gains in trade, investment and welfare to the tune of 4% of GDP. Their analysis "From Project Fear to Project Prosperity" (EFT, 2017) advocates for the policies they believe would achieve this. It is notable that while EFT adopt the language of regulatory independence (Minford, 2017: 10), there is scant attention to the specifics of this independence with regard to regulatory standards. The 86-page report contains over forty triumphant references to removing the burden of EU regulations, but only six to the logical consequence of new non-tariff barriers for exporters after Brexit, and just three to the issue of regulatory standards

themselves. This sleight of hand amounts to assuming away the impact of new non-tariff barriers on UK trade, whereas for more circumspect commentators they are a central assumption about future obstacles to trade in goods; a 2017 House of Lords report concluded that "non-tariff barriers [will] pose as significant or greater a barrier as tariffs to trade in goods [after Brexit]" (House of Lords EU Committee, 2017: 98). EFT's negligence in the narrow area of standards is unsurprising in the context of their overall prescription of aggressive deregulation – "unilateral free trade with zero tariff and non-tariff barriers on the EU and the rest of the world" (Leach, EFT, 2017: 33). The aim of this policy would be to open the UK to non-EU goods and services at world prices, which are frequently lower than EU price levels. While EFT make much of the benefits (lower prices for domestic consumers), they acknowledge that the rest of the world is highly unlikely to reciprocate this deregulatory tactic – and sanguinely ascribe the negatives (the likely annihilation of many UK export sectors) to firms' inability to compete without EU protection. EFT's sparse coverage of the detail of regulatory standards after Brexit is at odds with the preferences of most domestic firms. In February 2018, the BBC reported survey evidence from small and medium-sized enterprises in the UK, revealing that most in this category consider alignment with EU regulations to be an asset rather than a liability (Jack, 2018). For exporters, regional and global regulatory standards matter profoundly insofar as alignment exempts them from the non-tariff barriers that non-EU competitors face. Regulatory independence can only be construed in terms of either freedom from international standards, or greater powers to affect those standards. The first construal is a non-starter for a country that still wishes to sell into foreign markets, while the second appears to be undermined by Brexit.

3.1 What are standards?

The International Organization for Standardization (ISO) defines a standard as "a document, established by a consensus of subject matter experts and approved by a recognized body that provides guidance on the design, use or performance of materials, products, processes, services, systems or persons" (ISO, 2018). This definition leads us to ask if regulatory outcomes vary according to state preferences, or whether the scientific nature of technical standards mean that they inevitably converge to the single (objective) best solution to a standardization problem. The relevance of state preferences to standard-setting is a *sine qua non* for any conception of regulatory independence. Some literature does indeed relegate state preferences in standard-setting to a marginal issue of "subordinate" actors. Loya & Boli (1999: 192) theorize that "the competitive struggle between states is not permitted to shape the products of global standards organizations". In this view, optimized scientific rationality supersedes divergent material interests, because "standardization is a resolutely co-operative venture" in the international sphere. They base their analysis on a teleological appeal to the idea that "scientific, technical knowledge is everywhere the same" (1999: 188). In this view of the international standardization system, globalization has robbed states of this aspect of independence that they might otherwise exploit for strategic purposes, and delegated it to more reliable scientific arbiters.

3.2 State Power & Standards:

A contrasting view is offered by scholars who emphasize the ongoing relevance of state power in international standard setting. Drezner (2007) argues that the global regulatory agenda may be influenced by international non-governmental organizations and multinational corporations, but is primarily determined by the preferences and relative economic power of states. He summarizes his argument in the following passage:

"The great powers – defined here as governments that oversee large internal markets – remain the primary actors writing the rules that regulate the global economy. The key variable affecting global regulatory outcomes is the distribution of interests among great powers. A great power concert is a necessary and sufficient condition for effective global governance over any transnational issue." (2007:5)

He posits that the prevailing levels of relative market power have produced a bipolar distribution of authority between the United States and the European Union, to the exclusion of all other state actors. The US and the EU are the "great power concert" that contest regulatory outcomes to the benefit of their home corporate interests, who seek economies of scale and a first-mover advantage over new international standards.

Drezner (2007) introduces a caveat in relation to the questionable 'actor-ness' of the EU. If its status is not that of a state, what is it? Although it has many of the trappings of statehood (executive branch, legislature, supreme court, single market, external border, flag, anthem, *et cetera*), it cannot define itself as such out of sensitivity for the sovereignty of member states. Rather, it is a supranational and intergovernmental organization with distinct member states and all their attendant competing interests. The delegation of competences described in section 2.2 leads to more or less coherent actor-status in different policy areas. Drezner (2007: 39) says that "treating the European Union as a single actor in the co-ordination of global economic regulations is still a significant assumption, but is hardly a heroic one." While the EU is certainly not a unitary actor in the area of conventional foreign policy, it is more unitary for the regulatory sphere, where the European Commission exercises discretion in collective bargaining.

Standards *per se* are important to firms, rather than states, because only firms incur the costs of complying with them. Because firms can threaten to engage in arbitrage between host states, it could be the case that states are dependent on internationally mobile capital, and thus

incentivised to impose their own business-friendly preferences on international standards. However, Drezner emphasizes the importance of the inverse dependence, of firms on the state.

> *"Firms rely on governments to establish and enforce the rules of the game for economic interactions. Key business traits ranging from corporate governance to innovation strategies to procurement policies are often contingent on pre-existing state structures. Legal institutions play a critical role in determining the relative sophistication of national markets. States continue to act as the primary negotiating agents in international fora, and retain the final say in developing the domestic rules that govern economic activity. Governments are far from the only actors in global governance – but they matter the most"* (2007: 34; see also Simmons (2001) for great power influence on regulation of financial services).

Drezner thus casts states as the international representatives of their home industrial actors with extraterritorial interests. These multinationals have at least three reasons to voice preferences for harmonized global standards have over fragmented national ones.

1. Harmonized global standards allow for single production processes.

Contra the neoclassical assumption of a world of homogeneous firms facing decreasing returns to scale, Drezner (2007: 43) cites the existence and prominence of multinationals as evidence that this assumption may be flawed. Allowing for increasing returns to scale legitimizes the economic case for harmonized global standards. Limiting the institutional costs of complying with multiple regulatory regimes affords multinationals a static advantage, but also a dynamic one over smaller domestic firms who face high adjustment costs once (different) global standards are imposed. Murphy (2004) corroborates this argument with his analysis of non-multinationals' attitudes to global standards convergence. He posits that firms with investments specific to transactions limited to one domestic market will fight against the homogenization of regulations: "When a firm has sunk assets into

transactions particular to a given domestic regulatory environment, it cannot redeploy these assets elsewhere without losing considerable value" (Murphy, 2004: 89).

2. ***Multinationals' need for consistent branding reinforces preferences for harmonized global standards***

The advantages that accrue to multinationals with consistent brands are well attested. International consistency in cultivating and maintaining brand identity becomes more difficult once a firm must operate in multiple regulatory environments.

3. ***A harmonized global regime streamlines the political process through which firms can influence regulatory change***

This is one iteration of the basic observation that firms require certainty over their planning horizon. The existence of national standards in each jurisdiction with production facilities would require firms to invest more heavily in assessing multiple political climates, which leads to greater uncertainty.

The largest markets therefore exert a centripetal influence on the production decisions of businesses. In Drezner's words, "a great power has an economy of sufficient size such that it acts as a natural attractor for profit-seeking actors while being able to rebuff potential coercers. Simply put, great powers are price makers, not price takers" (2007: 34). Murphy (2004) notes the extraterritorial possibilities of large market size: governments of states with large internal markets may use market access regulations not only to protect domestic industry, but also as a "club" to influence regulations in other countries: "If those foreign countries do not move toward a common (higher) process regulation, or toward fewer discriminatory market-access regulations, their exports may be denied market access" (2004: 93). Bach and Newman (2007) dispute Drezner's thesis, and argue that "a sizeable internal market must be coupled with potent regulatory institutions to yield power over global governance" (2007: 827). In this view, the

market power explanation is necessary but not sufficient to explain global influence. Drezner (2010: 796) suggests that this is to miss the point; market power is of *primary* importance, such that "regulatory capacities are of marginal importance without market size." Unless they belong to the largest markets, national regulatory institutions are toothless on the global stage.

Here, it is important to state the brute facts of the UK economy in relation to the power players in international standard setting. While the UK is among the world's most affluent countries, the size of its internal market makes it a middle power by any measure, relative to the US the EU27, and China (see Figure 5).

Fig. 5: Measures of Economic Power: US, EU, China and the UK

Measure of Economic Power	***United States***	***EU27***	***China***	***United Kingdom***
Population (millions)	327,000,000	443,000,000	1,380,000,000	65,000,000
GDP (Market exchange rate, billions US$)	18,624	13,839	11,200	2,648
GDP (PPP, billions US$)[6]	18,121	17,549	21,451	2,828
Per capita GDP (PPP, current international $)	57,638	39,838	15,559	43,080

Sources: *CIA World Factbook, World Bank Data*

[6] In contrast to nominal measurements of GDP, Purchasing Power Parity (PPP) is a measurement that equalizes the exchange rates of different currencies in relation to a fixed basket of goods and services.

If relative market power is essential for influence over regulatory outcomes, the UK's smallness suggests that that Brexit, in principle, cannot deliver regulatory independence.

Drezner (2007), writing in a different context, concedes that the bipolar distribution of regulatory authority is a contingent feature of the system. The contemporary assessment of China's status was of a credible future candidate for great power status. China's subsequent economic performance indicates a potential shift underway. In terms of the relative distribution of economic power, this could produce a multipolar system of interstate regulatory authority. While these new parameters could very plausibly change the dynamics of regulatory contestation in ways that constrain the UK after Brexit, it reinforces the theory that input is an option only available to states with the largest markets. Plucky middle powers do not have a stake in the regulatory game. The exception comes in the EU member states that pool sovereignty to exercise collective bargaining power over others.

3.3 The Limits of State Power:

In this realist view, international standard-setting is at least partially a question of conflict over co-operation, and the promulgation of standards is a mode of coercion in which power asymmetries play a deterministic role in regulatory outcomes. However, Mattli & Büthe (2003: 17) argue to the contrary that "[r]ealists greatly exaggerate the ability of governments to intervene effectively in the institutionalized processes where states as such as not recognized as legitimate actors." Their premise is an alternative institutional history of the international convergence of standardization. While the realm of (product) standards has become increasingly harmonized, they argue that the main drivers of this harmonization have been non-state actors, who organized in reaction to the market failure of fragmented national standards. In the post-war environment, national standards were, more frequently and blatantly than today, protectionist

barriers designed to protect uncompetitive domestic producers. Mattli and Büthe (2011: 125) cite the 1986 example of the Japanese Consumer Product Safety Association (JCPSA) requiring that all skis sold in Japan meet a new set of design specifications to get an approval seal. No foreign applicant was granted the license, which the JCPSA sought to justify by spuriously claiming that Japanese snow was "different" to the snow found in other (ski-exporting) countries.

Such protectionist abuses necessitated impartial structures. This led, during the 1980s, to the greater prominence of the Geneva-based International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC). These non-governmental organizations were both founded for product engineers to aggregate technical preferences without the interference of national bureaucracies (Mattli and Büthe, 2011: 3). Both are comprised of the "most broadly representative" national-level standard-setting body from each country. This is almost always private-sector organizations funded by industrial contributions.

In many sectors, the ISO and the IEC became the "focal" – i.e uncontested – standard setting institution before multilateral tariff liberalization raised the stakes of non-tariff barriers. Their importance was bolstered further by legitimation in the context of the WTO. The WTO Agreement on Technical Barriers to Trade (WTO, 1995) stipulates in Article 2.4: "where technical regulations are required and relevant international standards exist or their completion is imminent, Members shall use them . . . as a basis for their technical regulations." The TBT Agreement was incorporated into the Agreement Establishing the World Trade Organization, meaning that its stipulations became binding on all signatory states. Mattli and Büthe (2011: 7) note that while the TBT did not define standards as the *exclusive* preserve of the ISO and IEC, they are explicitly given a prominent role, which constituted an "implicit delegation of regulatory authority". As of 2011, the ISO had produced over 18,000 technical product standards, and the

IEC over 5,500. Mattli and Büthe (2011: 7) estimate that the combined total accounts for over 85% of all international standards.

3.4 Who Dominates?

Mattli and Büthe (2003, 2011) argue that institutional differences between the standard setting networks in the US and the EU tend to result in earlier and fuller input of European preferences in these institutions, and ultimately in greater EU power over global norms. If the EU is the state actor with predominant institutional sway in this domain, Brexit can only undermine the UK's freedom to implement its own regulatory preferences.

The asymmetry between the US and EU is a reversal of historic trends. Vogel (2003: 1-2) reports that from the 1960s to the 1980s, US regulatory standards tended to be "more stringent, comprehensive, and innovative" than those found in Europe at either the national or the supranational level. Around the end of the 1980s, changing domestic preferences caused the pair to trade places. The EU has subsequently been at the forefront of the drive towards more precautionary consumer protections.

The US and EU systems have very different institutional architectures, which contributes to the latter's systematic success in achieving a first-mover advantage. The US system of standard-setting bodies is a market-based one that operates with no governmental centralization, oversight or subsidy. This results in a fragmented network of hundreds of standard setting bodies and high competition between their outputs of technical standards. This flat, anarchical structure has no arbiter, and it is against the interests of the many standard setting organizations to co-operate strategically through information sharing.

In contrast, the European system of standard-setting bodies is hierarchical, subsidized and centrally coordinated. National-level bodies, such as the British Standards Institute or the

Deutsches Institut für Normung (German Institute for Standardization) are not fully autonomous institutions, but constituent levels of an EU hierarchy. They adopt and promulgate technical specifications, while also representing national interests at the supranational level. This latter level is populated by two major organizations, both partially funded by the European Commission: The European Committee for Standardization (CEN) and the European Committee for Technical Standardization (CENELEC). These fora serve to aggregate the national and industrial preferences in order to arrive at one consensual European standard.

The CEN operates as the regional equivalent of the ISO, while CENELEC maps onto the IEC in the same way. Mattli and Büthe (2011: 139) note that these "institutional complementarities" have facilitated formal links, namely the 1991 Vienna Agreement between the ISO and the CEN, and the 1996 Dresden Agreement between the IEC and CENELEC. The Vienna Agreement establishes comprehensive procedures of information sharing and institutional co-operation in the drafting of new standards. When a new standardization project is proposed, the relevant ISO technical committee decides by majority vote whether the ISO or CEN should be the primary drafter. While the majority remains with the ISO, the EU institutions have a privileged status: if EU regulations or directives have specific requirements that must be reflected in the new standard, or if the European Commission sets the deadline for the new standard, or if the majority of the affected firms are European, then the ISO delegates authority for the new standard to the CEN. Pending a vote by the ISO and the CEN, the European-designed standard then becomes an international standard without any further procedures. The 1996 Dresden Agreement contains parallel measures for the IEC and the CENELEC. This dry, procedural information was unlikely ever to light up the airwaves of an emotive referendum campaign, but it cuts through the optimistic notion of gaining regulatory independence by

leaving the EU. Even within the domain where non-state actors are predominant, the EU is the only state actor with codified institutional sway. Brexit entails a loss of influence in this system.

3.5 The Brussels Effect

Mattli & Büthe's analysis of the EU's institutional influence corroborates Bradford's identification of a "Brussels Effect" in international standardization (2012:2). This is a paradigm of a "race to the top" in global regulatory standards, by analogy to Vogel's (1995) "California Effect", which described the same phenomenon in the US federal system. Through a process of "unilateral regulatory globalization", Bradford argues that the EU has "a strong and growing ability to promulgate regulations that become entrenched in the legal frameworks of developed and developing markets alike, leading to a notable 'Europeanization' of many important aspects of global commerce" (2012: 2) The EU only has authority to regulate its internal market; but in the frequent cases where a multinational firm's production is not divisible for legal, technical or economic reasons, firms will prefer to maintain a single standard that satisfies requirements in all its markets, even if this standard is more stringent than the firms would prefer. What starts as a regional rule can quickly become a global one by this market process, called the "*de facto* Brussels Effect". This is sometimes backed up by a "*de jure* Brussels Effect", in which non-EU exporters that adopt an EU standard in order to access the single market then have an incentive to lobby their domestic governments to adopt these standards, so non-exporting firms also have to incur the costs (Bradford, 2012: 6). This is a "race-to-the-top" dynamic that EFT's proposal of unilateral deregulation conveniently assumes out of the picture. If firms prefer to produce to single global standards rather than a fragmented set of national standards, middle power unilateralism is unlikely to convince firms to switch or divide their production processes.

In conclusion to this section, the theoretical support for a middle power achieving regulatory independence is scant. An event like Brexit, seismic though it may seem from the UK's perspective, is not of sufficient weight to alter the rules of the game of international regulation: for a vulnerable middle power that wishes to sell abroad, regulatory interdependence is a constant. The variable is the symmetry of this interdependence. The UK's attempt to gain control over its own affairs entails an abdication of the right to influence international rules in those fora where direct state preferences are relevant. This is a shift from a more symmetrical interdependence, from its position of influence as a member state, to a more asymmetrical dependence as a third party. The picture is complicated further by the autonomy of private institutions, where states do not have direct formal legitimacy. However, the EU's regional hierarchy of standard-setting institutions maps onto the functions of these institutions, enabling procedural influence over the adoption of new global rules. Brexit, as a transformative assertion of national sovereignty, would appear to undermine the UK's regulatory autonomy.

Sectoral Case Studies:

The harder versions of Brexit outside the single market will affect the UK economy unevenly. The mooted trade scenarios include three models providing inversely related levels of single market access and regulatory independence: EEA membership (full access, no independence), a UK-EU FTA (partial access, partial independence), and WTO rules (low access, high independence). The WTO option is the default outcome if negotiations fail. Modelling the WTO scenario's regulatory impact, the consultancy Oliver Wyman estimated that 70% of red-tape costs from new trade barriers would be borne by five UK sectors - financial services, automotive manufacturing, agriculture and agri-food, consumer goods, and chemicals & plastics (Iyer et al, 2018). Below, I examine in detail the first three of these sectors, and the likely consequences on

their viability if a policy of maximum regulatory independence is pursued. In all circumstances, UK firms' competitive edge will diminish if differences in regulatory standards between the EU and the UK increase. This selection illustrates the different ways regulatory divergence would affect trade in goods and in services. For sectors like financial services, barriers to trade are solely beyond, rather than at the border. For trade in goods, like cars and agriculture, the imposition of tariffs is a first-order issue that could be resolved by a UK-EU customs union. Nevertheless, even in such a case, trade in goods would be subject to a host of non-tariff barriers that apply beyond the border. Absent the EEA option, the border between the UK and the EU will matter even if the UK and EU agree to establish a customs union; this would abolish tariff barriers between internal parties, but UK goods would still have to be inspected for regulatory compliance before admission into the EU.

4. Financial Services:

The UK financial service sector merits close study, because the industry's future is of greater systemic importance to both sides than any other. London has, for several decades, been Europe's unrivalled financial centre. The risk to the City of London's status is serious, as multinational banks are known to have had their "hands quivering over the relocate button" since the hard Brexit vision was first articulated (Browne, 2016).

4.1 What Is at Stake?

Hard Brexit poses the most acute threat to trade in services because outside of the EU single market, international trade liberalization in services is far less developed than it is for goods. A cliff-edge loss of EU market access or regulatory compatibility would provoke at least a partial flight of financial service institutions from the UK to the EU or to other global financial centres.

This would have dire consequences for the UK, for both prestige and more pragmatic reasons. While much maligned in the domestic discourse, the financial services industry is one of the UK's few areas of genuine international excellence. According to the IMF, UK banking institutions (excluding the Bank of England) control around £20 trillion of assets, which is over 10 times the UK's GDP (IMF, 2016: 9). Approximately one fifth of the world's banking activity takes place in the UK, and about half of the world's largest financial institutions across the banking, insurance and asset management sectors have their European headquarters in the City (Peihani, 2017: 10). Measured in terms of gross value added (GVA), a House of Commons briefing found that in 2016 financial and insurance services contributed £124.2 billion to the UK economy, or 7.2% of the UK's total GVA (Tyler, 2017: 3). There are over 1 million jobs in the financial and insurance sectors, which is over 3% of all UK employment (2017: 8).

Most consequentially, the sector makes vitally important contributions to the UK Treasury. A City of London Corporation research report (2016) estimated that in 2016 the entire financial services sector paid £71.4 billion in tax, up from £66.5 billion in 2015. This former sum was 11.5% of the UK's total tax base for that year (2016: 5). Despite the remarkable unity of the EU27 throughout the first stages of negotiations, the future viability of the UK financial services industry remains an unresolved question, and such figures offer strong incentives at the Member State level to incentivize the banks to relocate.

On the other hand, interdependence is a two-way street, and the EU officials are mindful of the risks associated with any large-scale institutional upheaval.. More than half of Eurozone firms rely on the depth of the London market to raise capital through equity or debt, and no other European financial centre could immediately provide the same capacity (Peihani, 2017: 10). Philip Lane, the Governor of the Central Bank of Ireland and a member of the European Central

Bank's Governing Council, has warned that the European financial system's stability could be threatened by a disorderly Brexit without a transitional deal for financial services (Jones, 2018).

4.2 The Three Models

Broadly speaking, financial institutions will make their relocation decisions based on two variable outcomes of the negotiations, which taken together will determine UK sector's future viability: 1) the degree of single market access afforded to UK financial institutions; and 2) the recognition of compatibility between the UK and EU regulatory architectures. The only way to avoid damage to the financial services sector is through a continuation of comparable market access *and* regulatory compatibility with the EU. I will examine the following options that emerge from this background as potential strategies for protecting the viability of the UK financial services sector.

1) ***"Norway": Full access through European Economic Area (EEA) membership; continuation of passporting***
2) ***"Canada Plus": Gain partial single market access with an FTA; seek equivalence decisions from EU***
3) ***"Singapore-on-Thames": WTO-level access to single market; adopt a strategy of aggressive deregulation***

The condition of full market access under option 1, as Norway enjoys as an EEA member, is adherence to the *acquis communautaire* and the four freedoms, which would lock the UK into regulatory alignment with diminished rule-taker status. Adopting this model would formally satisfy the referendum result of leaving the EU while protecting the sector, but would be seen as a betrayal of the UK's independence. On the other hand, options 2) and 3) privilege moderate and high degrees of regulatory independence respectively, but would curtail the market

access and regulatory compatibility of the UK's most productive sector, and increase the likelihood of relocations. The FTA option would come with more EU-imposed constraints than the WTO option, but the WTO option would likely be the most ruinous.

4.3 The "Norway" Option: EEA Membership with Passporting

The European Economic Area is a single market established between the EU and the EEA signatories: Norway, Iceland and Liechtenstein. In exchange for full market access, these three countries accept the legal primacy of the *acquis communautaire* and the four freedoms, but do not have voting rights on new legislation. Outside the EU and EEA, the starting point for trade in financial services is that firms must comply with all regulations in each host state in which they operate. This is in marked contrast with the EU's regime, where the free movement of capital allows for two dimensions: the freedom to provide financial services, and the freedom of establishment across national borders (Peihani, 2017: 11). This principle was systematized in the 1990s with the introduction of passporting, which is a distinct type of mutual recognition governing European financial institutions. A European passport is an operating licence granted by the financial regulator of any given member state, which is valid throughout the single market. In effect, once a financial service provider is recognised in one EU or EEA jurisdiction, no other jurisdiction can apply further barriers to its activities. This enables entities registered in the UK to carry out their international activities without incorporating multiple times, or applying for national licenses in the host market.

The introduction of passporting has enabled significant cost savings for multinational financial institutions. This is a tangible example of single market membership having benefitted the UK over other member states. If the UK's participation ends, it will force banks and other financial services firms to disperse to other candidate financial centres (e.g. Frankfurt, Paris,

Luxembourg or Dublin). In doing so, they will by necessity incur new restructuring, funding and legal costs. While the wholesale gutting of the City is unlikely, there is a risk of significant fragmentation. The consultancy Oliver Wyman has estimated that 20% of the sector's annual revenue is dependent on passporting rights (Sants et al., 2016: 14).

Philipponat (2017: 17) notes that the UK's abdication of EU membership makes the continuation of passporting impossible as a matter of the mechanistic operation of the law: "By definition, an authorisation granted by a UK financial authority after Brexit will not be an authorisation granted by a Member State regulator. Financial authorities authorised only by the British regulator will lose their passport to access the EU single market from the day Brexit comes into effect." As Michel Barnier wryly insists, "Brexit means Brexit – everywhere" (Stone, 2017) The possible exception to this is the take-up of EEA membership, characterized as the 'Norway option'. While this would preserve passporting rights, it entails identical obligations on freedom of movement and a diminished status in regulatory bargaining. Actively seeking an outcome that preserves passporting by establishing a more asymmetrical regulatory relationship appears to be the best damage-limitation strategy, but would be perceived politically as an unacceptable capitulation of independence.

4.4 The "Canada Plus" Option: FTA with Third Country Equivalence

In the January 2017 Lancaster House speech, Theresa May indicated her intention to negotiate a "new, comprehensive, bold and ambitious Free Trade Agreement" combining elements of single market access for key sectors like financial services (May, 2017a). The advantage is that it would allow the UK to retain its advantageous position in financial services whilst retreating from the EU's regulatory orbit. The disadvantage is that nothing of the sort has ever been negotiated, and it is not on offer from the EU. Government ministers have referred to this as the "CETA Plus"

model, reflecting their desire to take the blueprint of the Canada-EU FTA and enhance it to the UK's advantage. While CETA's Chapter 13 is dedicated to the liberalization of trade financial services between Canada and the EU, these parties were starting from fundamentally different positions, and the advantages that accrue to Canada fall short of the UK's requirements. Importantly, paragraph 6 of Chapter 13's Article 7 states that the obligation to allow cross-border trade in financial services "does not require a Party to permit such suppliers to do business or solicit in its territory." In other words, Canadian institutions selling to European partners must follow the rules and procedures of the host country, and vice-versa (Leblond, 2016: 4). This is fundamentally different from the regulatory freedom allowed by the UK's passporting rights. In short, Canada has the level of regulatory independence that the UK desires, but does not have the same level of market access that the UK needs with respect to the EU.

Moreover, the UK's attempt to end its regulatory obligations by leaving the single market means the EU has reasons not to improve on the access accorded to Canada. CETA includes of a Most Favoured Nation (MFN) clause. This is a promise for each party not to treat its partner less advantageously than any other country with this MFN status. Its inclusion binds the hands of the EU in its dealings with the UK. Even if it did find the political and economic will to grant additional services access to the UK, it would be bound to offer the same upgrade to all other FTA partners with MFN status, without the latter being obliged to offer anything in return (Oppenheim & Grant, 2017: 3).

Is there scope to upgrade CETA? The UK government appears determined to show that third-country status vis-à-vis the EU is the only way to fulfil the referendum mandate. This implies an automatic return to a decentralized regulatory model of country-by-country authorization. Firms will simply relocate to avoid this burden, a process that some banks have already started. However, Armour (2017: 26) notes that since the financial crisis the EU has had

to rethink this decentralized approach to third-country firms, as it complicates the oversight of systemic risk. The result is an emerging body of law known as Third Country Equivalence (3CE), which allows limited centralized authorization of third country firms. It is arguably the most pragmatic plan B for financial services. To the degree that it substitutes for full membership, it removes the need to incorporate in other countries, and would offer greater regulatory compatibility than the basic FTA.

However, 3CE matches up poorly both in terms of access granted and regulatory independence. By design, 3CE is narrow in scope. For instance, 3CE is in general afforded only to wholesale financial services, while provision of retail services is typically excluded. This would preclude the continuation of core banking activities like deposit-taking and cross-border lending. Secondly, 3CE is not written in as an option to every piece of EU financial legislation. For example, it is entirely absent from the regulatory framework governing mutual funds. Where it does exist, the threshold requirements vary in an arbitrary way (Ringe, 2017: 31). Equivalence does not offer holistic access because it was never conceived with a situation like Brexit in mind. It was always intended to be a tool for granting (marginal) access to third countries, rather than as a central mechanism of liberalization.

Moreover, while 3CE is a pragmatic accommodation, it is an unenviable solution in that it would increase the UK's regulatory dependence on the EU. While passporting is a right conferred by membership, equivalence is a privilege. It is the exclusive prerogative of the EU Commission to grant it, and is only guaranteed by the EU Commission's ongoing goodwill. In the event of unilateral revocation, the UK would have no recourse.

Neither is 3CE a static target. It is a recent regulatory innovation, and is still under development. Given the scheme to transpose the entire *acquis communautaire* into the UK statute books via the Great Repeal Bill, the technical feat of achieving equivalence when Brexit

occurs would not be the main obstacle. However, the UK would be bound, formally or otherwise, to apply each update to every equivalence framework to which it subscribed.

The politicization of the process is a more significant risk. The European Commission has executive power on granting equivalence, with technical advice from regulatory agencies. While the technical work may be straightforward, political bargaining tends to prolong the process. Bargaining is likely because granting favourable equivalent status to the UK could undermine the solidarity of the EU27. These worries manifested clearly in February 2017, when the EU Commission published a report outlining plans to strengthen the thresholds required for equivalent status. While the document makes no reference to Brexit, the messages are implicit and make grim reading for those concerned with the UK's regulatory freedom. "The decision is a unilateral and discretionary act of the EU, both for its adoption and any possible amendment or repeal" (EU Commission, 2017: 8). It stresses that equivalence is granted on the calculation of benefit to member states first, and to the third country only indirectly. Predicating the future financial services relationship upon this would be a guarantee that the UK would have to track the EU's regulatory path, although without any input to that path, and without any binding mechanism for compliance with new policies, as exists currently. Equivalence would be a gun to the head, in perpetuity – albeit one the Commission would be loath to use.

4.5 The "Singapore-on-Thames" Option: WTO Rules with Deregulation

The WTO scenario is the default scenario if the UK's membership expires without the UK and EU having agreed a deal. The relevant WTO agreement for financial services is the General Agreement on Trade in Services (GATS). The degree of liberalization achieved by GATS is significantly lower than that accorded within the single market (although in truth there is not much difference between GATS and CETA in this regard). Under GATS terms, governments are

afforded far greater leeway for protection of national service sectors, such as the carve-out allowing restrictions on cross-border financial services for prudential grounds (GATS, Annex on Financial Services, 2a). A European Parliament report concluded that "[this] scenario without any arrangements between the EU and the UK would lead to de-facto closure of the UK's access to the EU internal market" (De Vries et al, 2017: 15). It is uncontroversial that this option would represent the worst-case scenario for the UK's future market access.

The 'Singapore-on-Thames' approach was predicted in *Le Monde* two days after the referendum (Michel, 2016). In the days following the referendum result, George Osborne, still Chancellor of the Exchequer, proposed a recovery plan based on cutting the corporate income tax rate to 15%, lower than any comparably large economy (Parker, 2016). In the Lancaster House speech, Theresa May explicitly mentioned this threat as she insisted that "no deal for Britain would be better than a bad deal for Britain" (May, 2017a). "[W]e would have the freedom to set the competitive tax rates and embrace the policies that would attract the world's best companies and biggest investors to Britain. And – if we were excluded from accessing the single market – we would be free to change the basis of Britain's economic model" (*Ibid*).

The EU would have genuine grounds for concern if the UK adopted such an aggressive stance. While they will be keen to impose safeguards against this route in future, the probability of such a scheme succeeding, or even being attempted, has deteriorated with the UK's political stability (Enriques, 2017). This is because any relocation based on a newly favourable business environment is a costly decision. A firm needs guarantees of the new environment's stability, so as not to require a second relocation when the political climate changes again. The incumbent Conservative Party could attempt to attract business with a new tax and legal framework, but would not be able to offer credible guarantees that this framework would remain intact for any length of time.

In sum, the UK financial sector's access to and compatibility with the EU can only be fully preserved at a price that is politically impossible: EEA membership, and the surrender of all claim to independence that this entails. The credibility of a WTO default may be used as a threat, but it is not necessarily a credible one. The FTA-plus-equivalence scenario may be the most desirable compromise, but it would still leave the regulatory compatibility of the UK financial services sector entirely dependent on the continuing goodwill of the EU Commission.

5. Automotive Sector:

The UK automotive sector has been an exemplar of UK manufacturing success in the years since the financial crisis, and yet it is set to be hardest hit by any Brexit that prioritizes domestic regulatory autonomy over frictionless trade. In contrast to financial services, the relevance of customs for trade in goods poses a different set of non-tariff barriers at the border. From the perspective of the UK auto industry, four broad directions emerge:

1) ***Full single market access and regulatory alignment through European Economic Area (EEA) membership***
2) ***Create a UK-EU customs union; eliminate the Rules of Origin burden at the border***
3) ***Gain partial single market access with an FTA; accept new Rules of Origin burden at the border***
4) ***WTO-level access to single market; seek regulatory divergence***

I examine each scenario fully below.

Unlike with financial services, where some have argued that deregulation could have an upside, it is vital to note that no authority - academic, industrial or political – has publicly argued that regulatory divergence after Brexit could have any positive consequences for the automotive industry itself (House of Commons Business, Energy & Industrial Strategy Committee, 2018: 4).

Multiple independent researchers have concluded that UK automotive manufacturing is among the sectors so exposed by a Hard Brexit that it could reduce the profitability of foreign trade in the (mass market) sector to zero (Black 2017; Holmes 2016; KPMG 2017). It is therefore uncontroversial that apart from EEA membership, the above-mentioned possible outcomes are merely different gradations of damage limitation.

5.1 The UK Automotive Sector before Brexit:

Before the uncertainty arising from Brexit, the automotive sector had been one of the UK economy's recent star performers. In the decade up to 2016, co-operative policy planning and investment between the UK Government, manufacturers and trade unions led to a 60% increase in UK automotive production (Bailey and De Propris, 2016: 51). In real terms, the UK automotive sector's value grew 24% between 2007 and 2016 (Mor and Brown, 2017: 4). In an otherwise bleak manufacturing landscape, the sector's £15.8 billion contribution to the economy was 0.9% of the country's total output in 2016, but 9.4% of manufacturing output (*Ibid*: 2). The sector is firmly oriented towards exports. In 2016, the UK produced 1.7 million cars, of which 1.3 million were exported. 56% of UK exports go to the EU27. Conversely, 86% of the cars sold domestically are imported, of which 70% originate in the EU (House of Commons Business, Energy & Industrial Strategy Committee, 2018: 7). The UK is a relatively small participant in the continental market, which produced a total of 19.2 million units (European Automobile Manufacturers Association, 2018). These figures for finished vehicles conceal the broader picture of an industry in which mass production operates on a continental scale, with subcomponent producers dispersed into highly integrated regional supply chains that depend on the rapid clearing of goods at the border, and the harmonization of standards beyond it.

Since the 1980s, successive UK governments have adopted a strategy of encouraging foreign investors to use the UK as a production launchpad for export to the European continental market. Islam (2017) notes the irony in the UK's ongoing attempt to disassociate itself fully from the structures of European integration, given that "the car industry was the prototype for the single market." "Margaret Thatcher's promotion of foreign and particularly Japanese investment into the UK went hand in glove with the creation of the single market with one set of rules, and an arbiter, the European Court of Justice" (*Ibid*). Moreover, he notes that diplomatic promises have always buttressed this industrial arrangement: "In 1982 she [Thatcher] persuaded Nissan to invest in Sunderland partly by telling Mr. Kawamata [Nissan's former CEO] that 'dependence of Britain on exports to Europe meant no realistic prospect of leaving the European Economic Community'". Long term promises matter, and the Japanese government raised the prospect of their companies relocating in a public memorandum to the UK Government in September 2016:

"A considerable number of Japanese businesses operating in Europe are concentrated in the UK. We have been informed of a variety of requests that these businesses have in relation to BREXIT including: maintenance of trade in goods with no burdens of customs duties and procedures […] and harmonised regulations and standards between the UK and the EU. […] What Japanese businesses in Europe most wish to avoid is the situation in which that they are unable to discern clearly the way the BREXIT negotiations are going, only grasping the whole picture at the last minute" (Government of Japan, 2016: 1-3).

For an industry so dependent on foreign investment, such warnings are ominous. The continuing viability of Japanese investment in the UK's automotive production is explicitly linked to an outcome that reconciles both customs and standards arrangements in the manufacturers' favour. This equates to a demand from a foreign government that the UK's

exercise in national sovereignty affirmation does not change the status quo at or beyond the border. This sets a high bar directly contradicting the aim of regulatory independence.

5.2 Eroding UK Influence

Before examining the trading models relevant to the automotive sector, we can ascertain that Brexit has already reduced the UK's regulatory influence. In February 2018, the EU Commission released a notice to car industry stakeholders detailing the withdrawal of the UK's right to approve new car models destined for the EU market (EU Commission, 2018). This function is currently carried out by the Vehicle Certification Agency, within the UK Department for Transport. Under the EU's mutual recognition rules, each member state has an analogous agency that can register cars made in any member state for sale across the EU. The location of production and registration often differs: Mini cars produced in the UK are registered in Germany, while Skoda cars produced in the Czech Republic are registered in the UK. The VCA currently holds registrations for Jaguar, Land Rover, Toyota, Nissan, Honda, Skoda, Peugeot and Citroën. (Campbell, 2018) All of these will henceforth have to seek new approval agencies in the EU27 when they produce a new model or significantly alter an old one. This event is representative of a wider picture: the UK's regulatory influence being progressively eroded by the interpretation of the referendum vote as a mandate for exiting the single market.

5.3 Full single market access and regulatory alignment through European Economic Area (EEA) membership

Adherence to the single market through EEA membership is the status quo option that manufacturers want, foreign governments demand, and British politicians refuse to contemplate publicly. It is the best damage limitation scenario for the industry because it would avoid the

imposition of tariffs and maintain the *acquis communautaire*. The UK would submit itself to a state of permanent regulatory alignment with all current and future standards relevant to vehicle production in the EU, such as emissions and road safety. This would allow the current business model to continue, with the caveat that it would diminish the UK's influence over rule-making at the EU level. Global automotive standards are created by the United Nations Economic Commission for Europe (UNECE), which tends to focus on safety standards, and the EU itself, which is more active in environmental regulation (House of Commons Business, Energy & Industrial Strategy Committee, 2018: 12). The UK has been a proactive shaper of regulations within both bodies, often seeking to negotiate flexibility for manufacturers. The Society of Motor Manufacturers and Traders (SMMT, 2014: 14) highlights how the UK government responded to industry concerns by successfully negotiating derogations from the EU's Electromagnetic Field Directive, which mandated extensive automation in factories, thereby reducing compliance costs. Corroborating Bradford's (2012) concept of a "Brussels effect", automotive standards formulated at the EU level are often adopted by other global powers. For instance, China's newest generation of emissions standards for Light-Duty Vehicles have transposed EU standards wholesale (International Council on Clean Transportation, 2017). While the UK should consider the loss of voice outside the EU as a sunk cost for the UK, regulatory alignment to EU standards is non-negotiable if the UK wishes to export more cars into growing markets like China. China's tendency to adopt EU automotive standards into domestic law reveals the folly of contemplating divergence from EU standards as part of an agenda to boost non-EU trade. The EEA option would constrain the UK's freedom, but it would lock it into a system that facilitates trade not only with the EU but also with the rest of the world.

5.4 Create a UK-EU customs union; eliminate the Rules of Origin burden at the border

Creating a new UK-EU customs union, on the analogy of the EU-Turkey customs union[6] could remove some administrative burdens arising from the UK's third-party status vis-à-vis the single market, namely the Rules of Origin (RoO) requirements at the border. RoO make the preferential tariff rates of FTAs conditional on minimum thresholds of locally produced content. This is to prevent, for instance, manufacturers importing subcomponents from China at derisory prices, assembling them into finished articles, and then labelling them as a UK product to gain the FTA's zero-tariff benefit. RoO do not apply currently, because UK manufacturers are covered by the EU's common external tariffs since EU membership entails being part of the EU's customs union. UK goods exporters will not be able to circumvent the significant expansion of this regulatory burden outside of a customs union. RoO are a particularly cumbersome in high-tech sectors like automotive, where the industry relies on geographically dispersed value chains. However, Holmes (2016) points out that the harmonization of external tariffs between the EU and Turkey is imperfect, so in practice the RoO burden shouldered by Turkish exporters to the EU is only reduced, not eliminated. A customs union would be necessary but not sufficient, to avoid border bureaucracy, because a customs union cannot cover standards conformity.

5.5 Gain partial single market access with an FTA; accept Rules of Origin burden at the border

An FTA would enshrine terms of market access that could partially relieve the automotive industry by ensuring that no tariffs are imposed on UK-produced vehicles exported to the EU, as long as they satisfied RoO requirements. Holmes & Jacob (2018: 7) point out that

[6] European Union-Turkey Customs Union, 22 December 1995, [1996] OJ, L 35 [EU-Turkey CU]

the vision of Brexit wherein the UK signs a multitude of FTAs would aggravate the RoO burden, as each partner country would have its own unique set of RoO. This problem also illustrates the broader point that two countries signing an FTA do not automatically translate to private realisation of the potential benefits. The compliance costs associated with RoO may be a mere irritant for large exporters, but beyond the capacity of small and medium-sized firms (SMEs). In the latter case, many SMEs would find it more economical to forsake an FTA's preferential tariff rate rather than incur the administrative and legal costs required to comply with RoO.

The FTA scenario would likely lead to extensive disruption at customs posts that process UK-EU trade in goods, such as the ports of Dover and Calais, Rotterdam in the Netherlands, Holyhead in Wales and the Channel Tunnel. Currently, 99% of all goods that transit the channel tunnel pass without intrusive customs inspections, due to the shared rules and tariffs common to all EU member states (Islam, 2018). However, in the event of divergence, or even non-recognition of EU standards, European customs officials would be obliged to check the regulatory compliance of subcomponents each time the supply chain crossed the UK border. The cumulative effect of these checks would be severe. Authorities from the Port of Dover report that they process 10,000 freight vehicles every day, the equivalent of a 180km queue (House of Commons, Committee of Public Accounts, 2017: 8). More conservative estimates from the Channel Tunnel between the UK and France still paint a picture of administrative chaos: a two-minute clearance procedure on every freight vehicle could produce a 17-mile (27km) tailback on both the English and the French sides (Islam, 2018). This outcome would make the automotive industry's reliance on just-in-time (JIT) delivery untenable. In order to avoid this scenario, the UK would have to align with European standards legally, which would likely require the consent of a European oversight mechanism that ensures UK goods' compliance with EU rules.

Moreover, a basic FTA modelled on CETA would not avoid the issue of gradual regulatory divergence in standards between the UK and the EU. FTAs typically create institutional mechanisms for regulatory co-operation and information sharing, which fall short of the full harmonization and mutual recognition on which automotive and component traders currently rely. We could envision an FTA that locks the signatories into regulatory mechanisms such as a mutual recognition agreement for conformity assessment. Notwithstanding the issue of the EU's willingness to allow the UK to 'opt-in' to single market rules in this fashion, signing such an agreement would counteract Brexit's logic of regaining regulatory independence.

5.6 WTO-level access to single market; regulatory divergence

The tariff burden on the automotive sector implied by WTO terms would eviscerate the already low profit margins in this highly competitive sector. Foreign owners of brands that do not rely on "Made in Britain" marketing would have little economic case for developing new models in the UK, thereby making the stated aim of regulatory independence somewhat academic. Under WTO rules, tariffs on completed cars being sold to the EU can reach 10%, in addition to a separate 4% levy on components (Bailey & De Propris, 2017: 54). It is worth noting that in the global value chain model of subcomponent production, individual parts are subject to tariffs each time they enter a new customs area. This means that cross-border supply chains would suffer from the compounding effect of the 4% tariff levied multiple times across the production process. If these additional costs were passed on to customers, the price of a £15,000 vehicle would jump to £16,500, which would more than erase the current average per unit profit margin of £450 (House of Commons Business, Energy & Industrial Strategy Committee, 2018: 8). Under these conditions, the Government of Japan's coded warnings about Japanese firms relocating would move closer to reality. In February 2018, Japan's Ambassador to the UK told

journalists on the steps of 10 Downing Street that "If there is no profitability of continuing operations in the UK - not Japanese only - no private company can continue operations" (BBC Business News, 2018).

Even if foreign firms did relocate in the event of a WTO outcome, it is hard to see how the relative regulatory freedom arising from this would confer any silver lining. The point of regulatory independence is either to deregulate, or to institute a divergent set of equally stringent regulations more aligned with national preferences. In the case of the automotive sector, neither scenario responds to the preferences of manufacturers or consumers. As Drezner (2007) argued, the non-divisibility of production means multinational manufacturers have reason to resist any development that moves away from global regulatory convergence. Ian Robertson, a BMW Group board member, has explicitly dismissed this idea: "What we don't want is another set of rules. For the UK – a small manufacturer producing one million cars per year – to break out on a global scale with a new set of rules just complicates things further and would be very unfortunate" (Islam, 2017). Divergent UK production requirements would increase the cost of vehicles to consumers, since subcomponent and full vehicle manufacturers would be less able to exploit economies of scale than before, and would have to pass on these added costs. Moreover, it hard to see how the UK's consumer preferences for vehicle regulation could differ radically from prevailing regional and global safety and environmental norms; indeed, these protections are eminently desirable for consumers. Overall, regulatory divergence from global automotive standards would incur many costs without providing a single upside in terms of competitiveness or access to foreign markets (House of Commons Business, Energy & Industrial Strategy Committee, 2018: 7).

In sum, there is a strong consensus in industrial and academic discourse that Brexit only offers regulatory disadvantages for a sector as integrated as automotive manufacturing. The mass

market automotive sector is a highly competitive, low-margin industry that benefits greatly from global regulatory convergence, a process in which the UK *qua* member state was able to make decisive interventions. The automotive companies' commentaries are little more than ultimatums: the UK has a choice between sacrificing independence to continue its business, and sacrificing its business to gain a regulatory freedom that can confer no possible advantage.

6. Agriculture:

Regulatory independence would pose the same fundamental problem to UK agriculture as highlighted above for finance and automotive; the opportunity cost of the freedom to diverge from EU standards is a damaging loss of competitiveness for exporters. I analyse the regulatory issues for agriculture considering the added complexity arising from the link between regulatory independence and EU agricultural subsidies, which reveals a limited dimension of regulatory independence separate from trade. The EU's Common Agricultural Policy (CAP) is considered one of the EU's most economically inefficient activities, and Helm (2017: 132) argues "the opportunity that the end of the CAP offers is one of the few unambiguous benefits from leaving the EU." In the current system, the EU agricultural subsidies that keep UK farmers afloat are tied to their compliance with EU rules on environment, food, sanitary (animal) and phytosanitary (plant) standards. Brexit will end CAP subsidies, thereby changing farmers' legal relationship to these norms, and offering the chance to redesign independently those parts of UK agricultural regulation concerning farmer support. This does not entail freedom from foreign standards for exporters, who will still have to harmonize by other means. At best, Brexit delivers the freedom to change processes, rather than outcomes in agricultural regulation.

This section examines the effect of Brexit on regulatory independence in agriculture at two levels. Firstly, I outline the negative effects of the CAP, and how Brexit offers the Government certain opportunities to change the domestic regulation of agriculture. Secondly, I examine the

constraints of this new freedom in the domain of international trade. The UK's attempt to compensate lost EU trade with deeper ties to other great powers like the US is liable to produce a downward pressure on standards that curtails regulatory independence.

6.1 The EU agricultural framework:

The CAP is the European framework that provides financial support to farmers in member states. It was among the first big shifts in European integration, first articulated in the Treaty of Rome (1957). In the succeeding TFEU, the strategic rationale of treating agriculture as an exceptional case for subsidy is laid out in article 39. The CAP aims to: a) increase agricultural productivity through technical progress; b) safeguard the living standards of farmers; c) stabilize market volatility; d) ensure the availability of supplies; and e) ensure these supplies reach consumers at reasonable prices. The CAP has a two-pillar structure. "Pillar I", which accounts for approximately 75% of total CAP spending, is devoted to direct payments and market support measures. The remainder is given over to "Pillar II", which focuses on the provision of public goods such as rural development and conservation (Cardwell, 2017: 318). At present, UK producers are extremely dependent on these transfers. The EU disburses £3 billion of EU funds annually, which is equal to a third of the agriculture sector's annual £9 billion output (0.7% GDP). At most, agriculture comprises 1% of total UK employment (Helm, 2017: 124).

In the CAP's early years, the policy aimed to maximize productivity. It achieved this with various combinations of production-indexed payments to farmers, quotas, and price floors. Helm (2017: 125) notes that agricultural lobbies often succeeded in setting minimum prices above market equilibria. Thus, the CAP incentivized surplus creation, resulting in the infamous wine lakes and butter mountains of the 1980s. The overproduction also had deleterious environmental consequences. The CAP incentivized farmers to exploit every acre of arable land at their disposal for food production. Ever-greater tracts were given over to larger-scale farms applying industrial

agrichemicals, which resulted in negative externalities such as damage to biodiversity; increased air and river pollution; and disfiguration of the countryside. Farming is thus one of the only economic activities in the UK where the "polluter pays principle" has not simply been absent, but has been inverted: the regulatory architecture rewards negative externalities with public monies.

These excesses have come at a high financial cost. The CAP has always been the largest single item of the EU's expenditure – as high as 73% in 1985, then down to 39% by 2015 (Cardwell 2017: 312). In response to widespread criticism, the EU has undertaken various reforms, such as the decoupling of subsidy from production to a system where a 'single farm payment' is made, indexed to the area of farmland owned. This remedy created new diseases. Here the result has been a lucrative subsidy for rural land ownership itself, to the inadvertent benefit of wealthy anti-EU campaigners, Saudi princes, and Queen Elizabeth's estate (Geddes, 2016). The value of the Pillar I payments has translated into artificially inflated land prices, such that the elimination of payments would result in capital losses. A further perverse consequence of this system is that it erects high barriers to entry for newcomers, resulting in the EU allocating extra funds to help young farmers surmount obstacles that the CAP itself created (Helm, 2017: 127).

6.2 A new model for agricultural regulation:

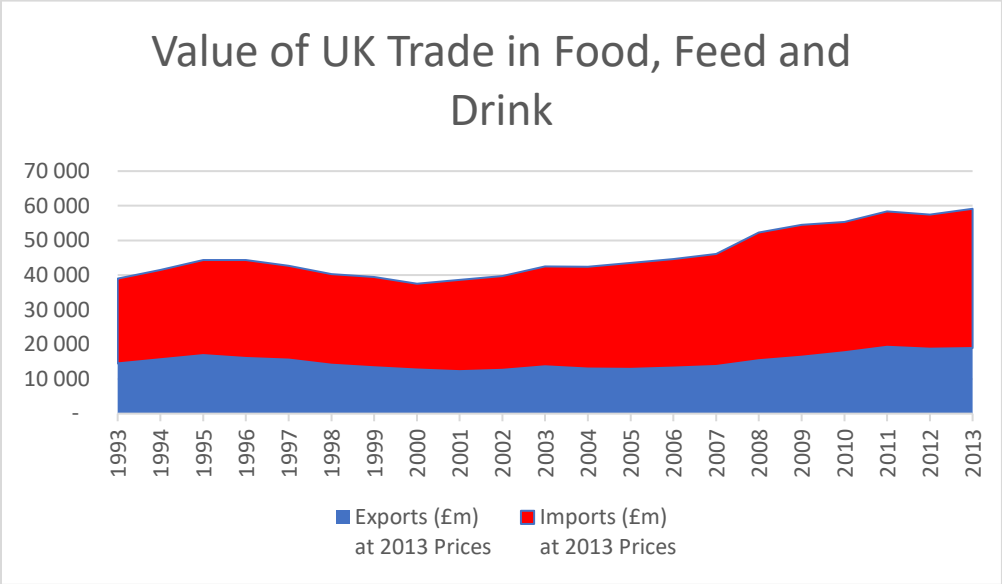
Agriculture is one of the few areas where the Government has articulated a non-contradictory post-Brexit position. In January 2018, the Environment Minister Michael Gove released a report entitled *"A Green Future: A 25 Year Plan to Improve the Environment"* (Gove, 2018). This made both concrete assurances of medium-term regulatory continuity, and also outlined the parameters of tangible divergence from the EU architecture. Firstly, the UK Government will give farmers time to adjust by underwriting the current level of subsidy until 2022. Beyond this date, however, the previous subsidy model will make way for a "public monies for public goods" model, explicitly designed to counteract the inefficiencies described above.

Helm argues that for farmers capable of producing public (environmental) goods, the CAP system offered no incentive to do so. The government's proposal adopts this thinking in its entirety; farm owners will "earn" their government support by providing public access and environmentally friendly land stewardship. Advocating for this shift of emphasis, Helm (2017: 130) concedes that "many of the farmers receiving CAP payments now would cease to receive any public subsidy. The main beneficiaries would be smaller and more marginal farmers in the uplands and in some lowland areas. It is therefore not surprising that the main farming lobbyists hate this option. But since marginal farmers tend to be the ones with critical low incomes, public goods for public money would transfer the bulk of subsidies to precisely those who, from a distributional perspective, most need them." The present paper is descriptive in purpose, and takes no position on the desirability of making these changes given the distributional consequences for the UK agricultural community. Nonetheless, in assessing the narrow question of regulatory independence after Brexit, it must be conceded that the UK Government will necessarily have greater autonomy over agricultural support.

6.3 Regulation, standards, and international trade after Brexit:

The UK, currently just 61% self-sufficient in foods, is highly dependent on foreign trade (Downing & Coe, 2018: 5). Moreover, the UK's food security is heavily integrated in international trading patterns in a way that is inextricable from trade with EU partners. This dependence is shown by the UK's overall trade deficit in food, feed, and drink (see Figure 7.)

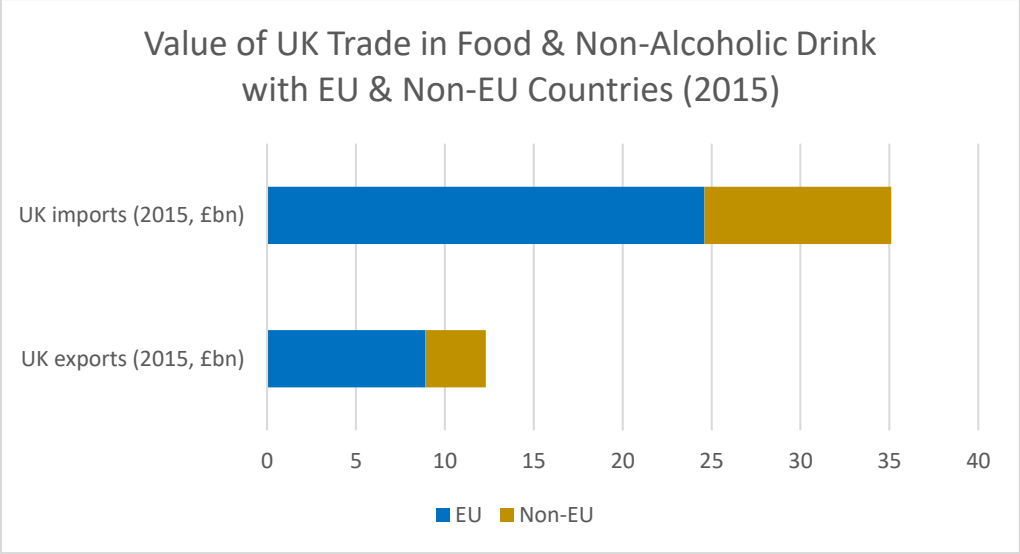
Fig. 7:



(Source: Department for Environment, Food & Rural Affairs, Overseas Trade in Food, 2013)

Underlying this deficit is a pattern reflecting the importance of proximity predicted by the gravity model of trade. The EU27 account for approximately 70% of both the UK's imports and exports in food and drink (see Figure 8).

Fig. 8:



(Source: Food & Drink Federation, HMRC 2016)

In many respects, these facts are to the UK's advantage in negotiating trade relationships, because it will continue to be a valuable import market for its closest partners. However, it also indicates the exposure of the UK food supply to a Brexit process that, in attempting to leave the single market, would the imposition of non-tariff barriers to cross-borders flows of produce.

As mentioned above, the freedom to diverge is interrelated with the CAP and its excision from UK law. CAP payments are made to farmers on condition of compliance with EU standards regimes that pertain to agricultural production, like the sanitary and phytosanitary (SPS) regime, in addition to an array of individual statutory instruments like the Nitrates Directive, the Wild Birds Directive and the Habitats Directive (Cardwell, 2017: 324). The UK must either apply its own enforcement mechanism, tracking the EU regime's evolution, negotiate a mutual recognition agreement with the EU, or face the disruptive consequences of divergence. After consultations with UK agri-food producers, the House of Lords European Union Select Committee concluded that "[n]on-tariff barriers could be equally if not more disruptive to trade in agricultural products and food [than tariff barriers]. Products must meet the standards of the EU market in order to enter it. If UK and EU regulatory frameworks begin to differ after Brexit, there is a risk of substantial non-tariff barriers for agri-food producers. The greater this divergence, the greater the need for customs checks and certification of products and production facilities. This could be costly and time consuming for UK farmers and food manufacturers wishing to export to the EU" (2017: 34). This amounted to a recommendation for the UK Government to commit to ruling out any deregulation of UK sanitary, phytosanitary, or food safety standards after Brexit.

6.5 UK Standards: Racing to the top?

Two diametrically opposed visions of post-Brexit standards have emerged within the pro-Brexit faction of cabinet ministers. Andrea Leadsom and Liam Fox have advocated for greater divergence

from, for example, the EU's stringent SPS regime and commitment to the precautionary principle[7] (Leadsom 2017). Leadsom's position, while impracticable, is at least consistent with the Brexiter position that EU standards are an excessive burden. Conversely, some pro-Brexit colleagues have counselled against the dilution of such standards in pursuit of new trade arrangements. David Davis has pledged to "kick-start a new global race to the top in quality and standards" (Davis, 2018), while Michael Gove, the new Environment Minister, has stated in the Commons that "I do not want to see, and we will not have, US-style farming in this country. The future for British farming is in quality and provenance, maintaining high environmental and animal welfare standards" (Hansard, 2017). There has been a broadly positive reception to this commitment, which reflects the strongly rooted public preference for standards of animal welfare higher even than those mandated by EU regimes. For instance, in the pig sector, the UK banned the use of closely confined sow stalls in 1999, while the EU introduced partial measures to the same effect as late as 2013 (Cardwell, 2017: 323). Nonetheless, the "race-to-the-top" imagery is a notable reversal for those who said Brexit would bring about deregulation and a supply-side liberation for UK producers.

In addition to public preferences, the economic arguments are firmly in favour of continuing harmonization. The opportunity costs of regulatory divergence underline the validity of Drezner's argument about the advantages producers derive from having harmonized production processes. Divergence from current EU standards would entail undesirable effects for UK producers and consumers: 1) producers who sell both domestically and internationally would be less competitive on international markets; and 2) foreign exporters to the UK would have to adapt their production

[7] The precautionary principle allows for discretionary power to ban any *potentially* harmful product or practice, even in the absence of empirical evidence that such a harm is caused. It effectively shifts the burden of proof that the item is not dangerous onto the producer or exporting country.

processes to meet differentiated UK regulations and standards, resulting in increased prices for consumers and potentially in a decreased variety of consumer choice in agricultural produce.

Whatever its support, the higher standards position is fundamentally incompatible with the transatlantic pivot that International Trade Minister Liam Fox considers indispensable if the UK is to compensate for UK-EU trade frictions. The totemic example of this conflict arose in July 2017 during exploratory talks for a US-UK FTA, when UK media reported that Fox would countenance diverging from the EU ban on chicken meat sterilized with chlorine as a pathogen reduction treatment, a standard practice in US poultry farming, which the US Trade Representative lists as one of the principal barriers to trade with the EU (US Trade Representative, 2017). The EU considers antimicrobial washes to be an unacceptable "end-of-pipe" substitute for high hygiene standards throughout the supply chain (Matthews, 2017: 3). There was a sustained outcry against this expansive interpretation of the 2016 vote as a mandate for lower food safety standards in the name of reclaimed sovereignty. In November, US Secretary of Commerce Wilbur Ross gave an address the Confederation of British Industry in which he talked up the prospects of a comprehensive US-UK FTA, but warned the that the deal was not feasible without regulatory compromise on, *inter alia*, food safety standards. Ross singled out with disdain the "limited role of science in [the EU's assessment of] risk, especially in sanitary and phytosanitary matters" (Gordon, 2017). The very existence of this dispute lends further credence to the view that it is great power preferences, rather than scientific rationality, that determine international regulatory outcomes.

Symbolic issues like chlorinated chicken are illustrative of the broader trade-offs. The UK public prefers the luxury of higher cost, higher standard foods. The government desperately needs to diversify its trading networks, and so appeals to the US as an FTA partner. The logical objective of US negotiators is to seek concessions on such incompatible standards so US producers can sell into the UK market. However, cheaply produced chlorinated chicken imported at zero-tariff rates from

the US would quickly leave many UK producers unable to compete on price. Consumers, despite their preference for higher standards, are also strongly motivated by low prices. The competing aims of achieving a compensatory US-UK FTA, continuing high food standards, and maintaining the viability of UK agri-food industries therefore become irreconcilable.

In sum, there is a domestic sphere of agricultural regulation where there is room to manoeuvre without fear of EU retaliation, although this freedom will come at the expense of subsidy-dependent farmers. In the international sphere, the UK's freedom to set its regulatory agenda is greatly constrained by the costs divergence would impose on producers and consumers, and by the invidious trade-offs incurred by great powers using the asymmetries in bilateral trade negotiations to exert downwards pressure on the smaller partner's standards.

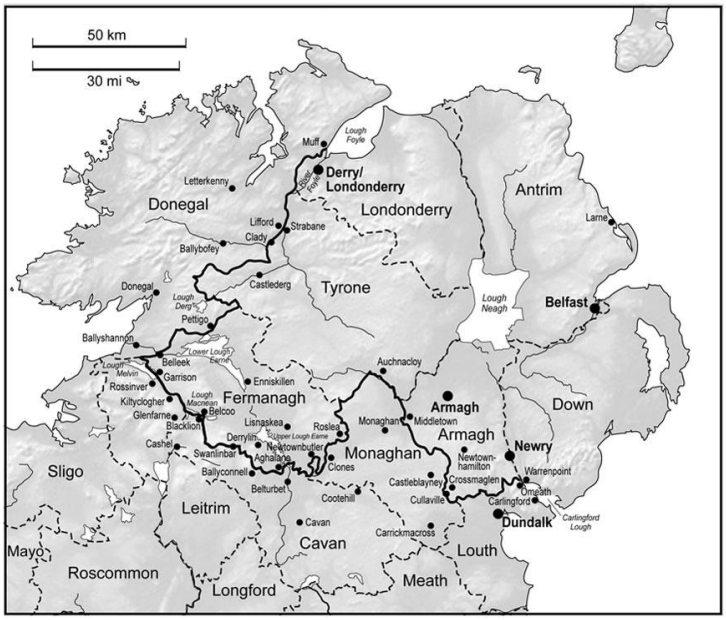
7. Regulatory Independence & The Irish question:

The referendum debate was conducted almost to the exclusion of the fact that, while an "island nation", the UK is geographically contiguous with the European Union on a second landmass. The island of Ireland contains the independent nation of the Republic of Ireland, in addition to Northern Ireland, which is the smallest of United Kingdom's four constituent nations. While the EU itself is no island – sixteen member states share a land border with a non-member - the existence of the shared border on island of Ireland is uniquely dangerous in the context of Brexit. I will show that the realisation of a hard Brexit with regulatory divergence can only come at the expense of the frictionless border enshrined by the 1998 Good Friday Agreement or the integrity of the United Kingdom as a four-nation polity. The lack of room for compromise means that the EU, which has its own priorities, will bind the UK into regulatory alignment with the EU.

7.1 The Border:

The border between Northern Ireland and the Republic of Ireland bisects communities, farms and roads for 500 kilometres – or 310 miles, depending on the standard you use (see Figure 9). The border originated in the UK Parliament's *Government of Ireland Act* (1920), which was intended to partition one restive territory into two internal constituencies. An administrative zoning exercise that was never meant to serve as an international border endured the 20th century and is now set to become the external frontier between the United Kingdom and the European Union when the Article 50 negotiation period expires in March 2019.

Fig. 9: The Irish Border



(Source: *The Irish Borderlands Project*, Queen Mary University of London)

Under current conditions, the border is more of a cartographic construct that a tangible reality, as it is devoid of fences, control points, and many other trappings of international frontiers. This "soft border" has prevailed since the 1998 Good Friday Agreement (GFA), which ended the preceding three decades of sectarian violence ("the troubles"). For the purposes of this

discussion, it is enough to note that a key condition of the GFA was the removal of hard border infrastructure (UK Government and Government of Ireland, 1998). The common membership of the neutrally-perceived institutions of the European Union is widely regarded to have a been a key solvent of the conflict (Connelly 2017: 45; Burke 2017: 1). The softening of the border has been marked by increased economic integration between the North and the Republic. Movement of people is unimpeded, with 30,000 commuter crossings every day. Firms benefit from harmonized supply chains that straddle the customs-free border. For instance, Diageo, the manufacturer of Baileys Irish Cream, relies on a supply chain that annually provides 275 million litres of milk from 1,500 farms on both sides. These operations require around 5,000 border crossings per year, an average of 14 per day (Connelly, 2017: 123).

7.2 The Problem:

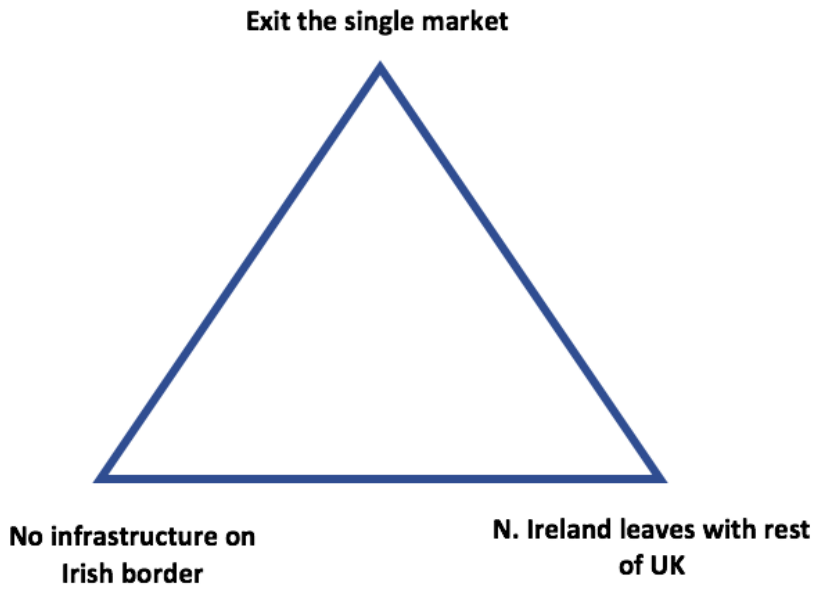
This frictionless trade is only possible under the rubric of mutual membership of the single market and customs union. Despite declarations to the contrary by UK government representatives, the departure of all regions of the UK from these institutions will, *de jure* or *de facto*, recreate a hard border with customs infrastructure because standards will not be mutually recognized. This will be a direct contravention of the terms of the Good Friday Agreement, and threatens the prevailing peace. According to Doyle & Connelly (2017: 158), "[a] 'hard' Irish land border will be economically disruptive and a powerful symbol that the peace process is in crisis. Installations on the border will be an inevitable target for armed groups opposed to the peace process, leading to a cycle of increased fortification on the border in response to attacks." The political calculus over regulatory independence is thus inextricably linked to an invidious security trade-off in addition to the economic ones.

Border posts do not only serve to administer customs duties like tariffs. They also perform a regulatory function, ensuring that goods that do not comply to the internal standards regime are not allowed to enter. For instance, compliance with the EU's Sanitary and Phytosanitary (SPS) regime must be checked at the same time as any applicable tariffs of foodstuffs are levied, as a responsibility of public safety to other member states. This requires EU-certified Border Inspection Posts, which have a precise legal meaning including the presence of EU-certified veterinarians onsite for SPS inspections.[8] (European Commission, 2009) A UK-EU FTA or a UK-EU customs union would *not* remove the need for these checks. At the most basic level, the UK's outsider status vis-à-vis the single market will make them necessary.

Yet the premise of Hard Brexit is that lost trade with the EU will be amply compensated by a series of FTAs in distant regions of the world. To take the most salient obstacle, comprehensive FTAs generally require mutual concessions on agriculture. The preferred end-state is to allow foodstuffs from, for instance, the US, China, and South American nations into the UK market – which includes Northern Ireland up to the border. These prospective trade partners have very different SPS regimes to the EU's, allowing pathogen reduction treatments like the infamous chlorinated chicken, discussed above in the context of UK-wide agriculture. The EU, invoking the precautionary principle, does not endorse these products. The EU's SPS regime is stringent, and does not admit of grey areas. Either the goods originate in the same regulatory sphere and may circulate freely, or they must enter through certified border inspection posts – which at present do not exist along the Irish border.

7.3 The Trilemma:

Avoiding the infrastructure outcome is the Irish Government's priority and an aspiration of the EU (European Council, 2017: 11). The otherwise divided Unionist and Nationalist factions in Northern Ireland converge in agreement that a hard border will provoke economic distress in their relatively impoverished region. Theresa May, who leads the Conservative *and Unionist* Party's pursuit of an independent UK, has repeatedly stated that there will be "no return to the borders of the past" (McConnell, 2016). There is a limited number of solutions to this conundrum, which can be understood as a formal trilemma it is only possible to achieve a maximum of two of the three outcomes. This trilemma is framed from the perspective of UK decision makers, in that each side of the triangle represents an apparently indispensable outcome of the Brexit negotiations (see Springford (2018) for a version of the trilemma that also deals with non-regulatory border issues like tariffs and VAT):



If the entire UK leaves the single market, regulatory divergence between the UK and EU will result in a hard land border with infrastructure to check the regulatory compliance of cross-border trade. Alternatively, a soft border could be preserved if there were regulatory divergence between Northern Ireland and the regions of Great Britain. The North would remain aligned with the EU's food safety regulations, resulting in an effective border in the Irish Sea (i.e. a hard border between Northern Ireland and the rest of the UK, meaning goods crossing between mainland Britain and Northern Ireland would have to be checked for regulatory compliance). This is arguably the most practical option. For instance, it does not easily avail itself to smuggling, which is of genuine concern to all parties. However, the sea border solution would entail the effective disintegration of the UK's "single market", or the barrier-free circulation of goods between England, Scotland, Wales and Northern Ireland. While some form of Irish unification within the EU is theoretically and legally possible,[9] a practical obstacle is that the Conservative and Unionist parties govern in Westminster without a Commons majority, relying on a confidence-and-supply deal with the Democratic Unionist Party's 10 MPs, whose political *raison d'être* is to preserve the constitutional union that prevails. Those who hold the balance of power object to the practical solution, meaning the prospect of a hard border between NI and the ROI remains the default. Furthermore, if Northern Ireland were allowed to remain within the single market, it would become harder to resist Scotland's calls for the same exemption.

Of course, the UK is not confronting this trilemma in splendid isolation, but in the context of a bilateral negotiation with the EU, which has its own competing interests. The EU's foremost objective is to protect the integrity of their common regulatory space. The aim the EU

[9] A European Council meeting at the end of April 2017 accepted that in the event of a future Irish Unity referendum with two concurrent majorities, Northern Ireland could join the EU without the normal accession criteria, relying heavily on the East German precedent.

shares with the UK, a soft border with no infrastructure, is in conflict with the UK's future trade agenda that could allow SPS-noncompliant products into Northern Ireland. Therefore, it is to be expected that the EU will leverage its negotiating power to achieve one of the solutions that satisfies these criteria: regulatory alignment between Northern Ireland and the Republic of Ireland, or regulatory alignment between the whole of the UK and the EU.

The chlorinated chicken issue is a useful heuristic device for illuminating these tradeoffs. In the public debate, the issue is understood in terms of safety. Will divergence from the EU's SPS regime and the precautionary principle expose UK consumers to undue risk? However, construed in terms of safety, chlorinated chicken becomes a red herring. As Lowe (2017) has argued, the safety of chlorinated chicken should be a tangential issue in the Brexit debate. The public interest question that should arise from the trilemma is the following: is the pursuit of freedom to diverge from the EU's SPS regime worth the (political and security) costs of customs infrastructure on the Irish border?

While the trilemma's dynamics have seemed imponderable to UK policymakers, they have been clear since Theresa May announced the end of the UK's single market membership. The December 2017 joint report between UK and EU negotiators following the conclusion of the first round of talks committed the UK to the following inevitable obligations (italics mine):

> "49. The United Kingdom remains committed to protecting North-South cooperation and to its guarantee of avoiding a hard border. Any future arrangements must be compatible with these overarching requirements. The United Kingdom's intention is to achieve these objectives through the overall EU-UK relationship. Should this not be possible, the United Kingdom will propose specific solutions to address the unique circumstances of the island of Ireland. *In the absence of agreed solutions, the United Kingdom will maintain full alignment with those rules of the Internal Market and the Customs Union which, now or in the future, support North-South cooperation, the all- island economy and the protection of the 1998 Agreement.*"
>
> "50. In the absence of agreed solutions, as set out in the previous paragraph, *the United Kingdom will ensure that no new regulatory barriers develop between Northern Ireland and*

> *the rest of the United Kingdom*, unless, consistent with the 1998 Agreement, the Northern Ireland Executive and Assembly agree that distinct arrangements are appropriate for Northern Ireland. In all circumstances, the United Kingdom will continue to ensure the same unfettered access for Northern Ireland's businesses to the whole of the United Kingdom internal market" (UK Government & European Commission, 2017).

Together, these paragraphs legally commit the UK to a specific resolution to the trilemma: maintaining a soft border and the integrity of the UK market while forsaking the flexibility to diverge from EU rules.

There is a technical contingency built into paragraph 49 of the joint report, which places the onus on the UK to propose "specific solutions". This has pushed the UK government into imprecise language about seeking a "customs arrangement" with the EU. Of course, everything from the painless present single regulatory space to a fortified border scenario under WTO rules would fall under the description of "a customs arrangement". "Specific solutions" is an impossible plea for policy innovation with granular detail to circumvent the rules of the trilemma. In the end, however, the trilemma cannot be avoided. This is why the Irish border, in the end state, is set to trump Brexit's foundational promise of regulatory independence.

8. Conclusion:

This research has responded to the argument that Brexit can deliver regulatory independence. I have argued that for a middle power like the United Kingdom, there is an inescapable trade-off between independence from the EU and the continuing economic viability of its export-oriented industries. I have focused on regulation and standards as non-tariff barriers to trade because those in favour of leaving the single market so rarely address these issues. As Nicolaïdis (2017: 94) notes, "UK politicians have had to learn, not least from their own negotiators, who know better, that unilateral openness means little in a world where trade is not mainly about tariffs, but

is underpinned by the mutual recognition of standards which are constantly and collectively updated, interpreted, and litigated." Any analysis that assumes away the barriers to trade from diverging regulations and standards is an insincere contribution to the Brexit debate.

In practice, the rational solution to this trade-off is to protect prosperity at the expense of the goal of regulatory independence. Unilateral development of standards is a privilege reserved for states with the largest markets and the most powerful regulatory institutions – a league which the UK cannot enter. It is a core irony of Brexit that the UK should seek to gain regulatory independence by leaving one of the world's only state-like entities that can impose its preferences on other states. In doing so, it can only make itself more asymmetrically dependent on the EU. I have also highlighted the extent to which non-state actors such as the ISO and IEC play a central role in the development and promulgation of harmonized global standards. These institutions are rarely considered in the debate, and independence from their influence is not a possible outcome of leaving the EU.

I have substantiated my argument with case studies of the regulatory consequences of Brexit on financial services, the automotive industry, and agriculture. For financial services and the automotive industry, I have framed my analysis through the lens of the possible future frameworks governing trade between the UK and the EU: membership of the European Economic Area, a Free Trade Agreement, and the default outcome of World Trade Organization rules. For both goods and services, the greater the UK's regulatory independence from the EU, the less access to the EU market UK exporters will have. The dominance of multinational corporations in both the financial and the automotive sectors means that the consequence of the loss of market access is likely to be the relocation of firms from the UK to the EU.

In the case of agriculture, I have acknowledged that regaining regulatory independence could involve aspects of economic governance beyond trade. Indeed, I have argued that Brexit

obliges the UK to redesign a system of agricultural support independently of the CAP. At the domestic level, this satisfies the criterion of greater regulatory independence. But while independence from the CAP will change UK farmers' legal relationship to EU standards, it will not change their need to comply with them for the purposes of international trade. Here, as for automotive manufacturers, the prospect of dividing production to comply with dual standards codes is unattractive, and the likely result will be alignment with EU standards, without the UK having institutional influence over their development in the future. Furthermore, any attempt to compensate for lost EU trade through deeper ties to the US is liable to pressure the UK into making standards concessions to the US that would jeopardize regulatory alignment. Both these dynamics curtail the UK's regulatory independence post-Brexit, and will leave the UK agricultural industry in an uncompetitive position.

I have argued that the question of regulatory independence must reach a critical point over the issue of the border on the island of Ireland. Theresa May's Lancaster House speech (May, 2017a), in which she committed the UK to leaving the single market, set off a trilemma. The UK Government has three aims (a single market exit, an entire-UK Brexit, and no hardening of the Irish border) of which only two can be satisfied at once. At the most basic level, if Northern Ireland exits the single market, the border criterion cannot be satisfied. Neither a customs union nor an FTA between the UK and EU can resolve this problem, since border infrastructure would be required in either case to ensure the regulatory compliance of goods entering the Republic of Ireland. The stakes in the Irish trilemma transcend economics, because border infrastructure would contravene the 1998 Good Friday Agreement and endanger a fragile peace. The EU has already forced the UK's hand on the trilemma through the language in paragraphs 49 and 50 of the December 2017 Joint Report: "*In the absence of agreed solutions, the United Kingdom will maintain full alignment with those rules of the Internal Market and the*

Customs Union which, now or in the future, support North-South cooperation, the all-island economy and the protection of the 1998 Agreement." The gravity of this legal commitment to "full alignment" with EU rules, now and in the future, is that the premise of Brexit delivering regulatory independence is, for all intents and purposes, impossible.

Given these realities of the UK's position, the political and economic turmoil provoked by the attempt to deliver regulatory independence will ultimately be unproductive. The UK's regulatory dependence on the EU will not be broken; it will in fact deepen as the UK transitions from rule-maker to rule-taker. An anonymous advisor to former Prime Minister David Cameron gave the futility of the project its most lapidary summation: "Brexit will be like the French Revolution. It will go on consuming people until everyone is dead. At the end, we'll reappoint the king" (Shipman, 2017: 534).

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